

# Department of Environmental Protection

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

Colleen M. Castille Secretary

## NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Mr. Terry E. Gish Responsible Official Reliant Energy Indian River, L.L.C. 7800 South U.S. Highway One Titusville, FL 32780 FINAL Title V Permit Renewal No. 0090196-005-AV Indian River Plant

Enclosed is FINAL Title V Permit Number 0090196-005-AV for the operation of the Indian River Plant, located at US 1 and Kings Highway, Titusville, Brevard County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

An electronic version of this permit renewal has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. The web site address is:

http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp

Any party to this order (permit) has the right to seek judicial review of the permit 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 Legal Office; 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 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on to the person(s) listed or as otherwise noted:

Mr. Terry E. Gish\*

Ms. Amy Deese, Reliant Energy Indian River, L.L.C.

Mr. Len Kozlov, P.E., Central District Office

U.S.EPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

# **FINAL PERMIT DETERMINATION**

# I. Comment(s).

No comments were received from Region 4, U.S.EPA, concerning the PROPOSED Title V Permit that was posted on the Department's web-site on October 13, 2004.

# II. Conclusion.

The permitting authority hereby issues FINAL Title V Permit Renewal No. 0090196-005-AV.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERT
<ul> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Signature  X
Article Addressed to:	If YES, enter delivery address below:
Mr. Terry E. Gish	•
Responsible Official	
Reliant Energy Indian River, L.L.C. 7800 South U.S. Highway One	
Titusville, Florida 32780	3. Service Type
•	Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.
	4. Restricted Delivery? (Extra Fee) ☐ Yes
2. Article Number (Transfer from service label) 7000 2870 0000 70	jazi 9805 !!!! !!! !!! !!!! !
PS Form 3811, August 2001 Domestic Re	turn Receipt 102595-02-M-1540

	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only: No Insurance Coverage Provided)						
9805	Mr Terry E. Gish Responsible Official S						
۲-	Postage	\$					
7027	Certified Fee						
	Return Receipt Fee (Endorsement Required)		Postmark Here				
0000	Restricted Delivery Fee (Endorsement Required)						
870	Total Postage & Fees	\$					
-0	Sent To	<del></del> _					
П	Mr. Terry E. Gish, Responsible Official						
7000							
7	City State, ZIP+ 4 Titusville, Fl	orida 32780	,				
	PS Form 3800 May 2000 See Poyers for Instructions						

# **STATEMENT OF BASIS**

Reliant Energy Indian River, L.L.C.

## **Reliant Energy Indian River Plant**

Facility ID No. 0090196

**Brevard County** 

FINAL Title V Air Operation Permit Renewal

Permit No. 0090196-005-AV

This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility described in the application, approved drawings, plans, and other documents attached hereto or on file with the Department, in accordance with the terms and conditions of this permit.

This facility primarily consists of three boilers and a lime storage silo.

Specifically, emissions units -001, -002, and -003 consist of three Combustion Engineering steam generators. The boilers may burn a variable combination of natural gas, propane, No. 6 and No. 2 fuel oils, and on-specification used oil from facility operations. Emissions units -001 and -002 share a common stack, with a height of 300 feet. Emissions unit -003 has a separate 300 foot stack. Unit -001 began operation on February 1, 1960; Unit -002 on September 1, 1964; and Unit -003 on February 1, 1974.

Emissions unit -008 is a lime storage silo filling system. The silo is equipped with a fabric filter baghouse made by General Resource Corporation, Model 13204.8. The baghouse is approximately 99 percent efficient in controlling particulate matter emissions. This source is located at the water treatment building. The silo began operation on February 25, 1993.

Also included in this permit are miscellaneous unregulated and insignificant emissions units and activities. Based on the Title V permit renewal application received on June 14, 2004, this facility is a major source of hazardous air pollutants (HAPs).

This permit renewal includes some changes to the initial Title V permit as described below.

1. The applicant requested the following change to Specific Condition A.20:

"It is requested that the requirement to analyze for fuel density be deleted, as the fuel flow monitors in use measure mass flow."

Comment: This change was not made to the permit renewal since the density is needed to properly calculate the percent sulfur, by weight, measurement. However, the following permitting note is acceptable and has been added to the permit.

{Permitting note: The density of each fuel (required by Specific Condition A.20.b) may be obtained by using appropriate data from the in use fuel flow monitors that measure mass flow.}

2. The applicant requested the deletion of Specific Condition **A.25.**, using the following justification:

"This permit condition was an artifact of the previous site permit that included the combustion turbine (CT) units."

Comment: This specific condition was previously revised via an Administrative Permit Correction clerked on February 19, 2002. Thus, the requested change to delete the specific condition was not made to the permit renewal.

- 3. The applicant requested the incorporation of the language of an Administrative Permit Correction clerked on July 25, 2003, that concerned Specific Condition A.3. in the permit renewal. This change was made to the permit renewal.
- 4. The applicant requested that the following permitting note be added:

"The permitting note below is requested to be added to the end of Condition A.1. Permitted Capacity. This language is to further clarify the role of the heat input limit in the TV permit.

{Permitting note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

[Rule 62-4.160(2), and Rule 62-297.310(2), F.A.C.]"

The Department agreed with the request to add this permitting note to the PROPOSED permit renewal.

Reliant Energy Indian River, L.L.C.

# Reliant Energy Indian River Plant

Facility ID No. **0090196**Brevard County

Title V Air Operation Permit Renewal FINAL Permit No. 0090196-005-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone: 850/488-0114 Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555
Fax: 407/897-2996

# TABLE OF CONTENTS

Section	Page
Placard Page	1
I. Facility Information.  A. Facility Description B. Summary of Emissions Unit ID Nos. and Brief Description C. Relevant Documents	2
II. Facility-wide Conditions.	3
III. Emissions Unit Conditions A. Fossil Fuel Steam Boilers	6
B. Lime Storage Silo.	17
IV Phase II Acid Rain Part	20



# Department of **Environmental Protection**

Jeb Bush Governor

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

Colleen M. Castille Secretary

Permittee:

Reliant Energy Indian River, L.L.C. P.O. Box 4567 Houston, Texas 77251-4567

FINAL Permit No. 0090196-005-AV

SIC Nos. 49, 4911

**Project:** Title V Air Operation Permit Renewal

This permit renewal is for the operation of three boilers and a lime storage silo at the Indian River Plant. This facility is located at US 1 and Kings Highway, Titusville, Brevard County, 32780; UTM Coordinates: Zone 17, 521.5 km East and 3151.6 km North; Latitude: 28° 29' 32" North and Longitude: 80° 46' 59" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named Permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

## Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and Activities Appendix I-1, List of Insignificant Emissions Units and Activities APPENDIX TV-4, TITLE V CONDITIONS (version dated 2/12/02) APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96) Figure 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM REPORT (version dated 7/96) Phase II Acid Rain Permit Renewal Application signed and dated May 17, 2004, by the Designated Representative

Alternate Sampling Procedures: ASP Number 97-B-01 and ASP 92-0-01

Effective Date: January 1, 2005

Renewal Application Due Date: July 5, 2009

Expiration Date: December 31, 2009

hulet y. Looke

Michael G. Cooke, Director

Division of Air Resource

Management

MGC/tbc

## Section I. Facility Information

# Subsection A. Facility Description

This facility consists of three boilers, and a lime storage silo. Also included in this permit are miscellaneous unregulated and insignificant emissions units and activities. Based on the Title V permit renewal application received on June 14, 2004, this facility is a major source of hazardous air pollutants (HAPs).

# Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions

E.U. ID	
No.	Brief Description
001	87 MW Unit No. 1 Boiler
002	188 MW Unit No. 2 Boiler
003	328 MW Unit No. 3 Boiler
008	Lime Storage Silo
009	Unregulated Emissions Units and Activities

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all test report submittals, applications, and other correspondence.

#### Subsection C. Relevant Documents

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

#### These documents are provided to the Permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Transfers

Statement of Basis

#### These documents are on file with the permitting authority:

Title V Permit Renewal Application received on June 14, 2004.

Notice of Administrative Permit Correction No. 0090196-002-AV clerked on July 25, 2003.

Notice of Administrative Permit Correction clerked on February 19, 2002.

DRAFT Title V Air Operations Permit Renewal clerked on August 12, 2004.

PROPOSED Title V Air Operations Permit Renewal posted for EPA review on October 13, 2004.

# Section II. Facility-wide Conditions The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the Permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
- 2. Not Federally Enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1. & 4., F.A.C.]

<u>{Permitting Note:</u> Although the Permittee is <u>not</u> required to perform a visible emissions compliance test to demonstrate compliance with the facility-wide limitations annually or before renewal, if the Department believes that the general visible emissions standard is being violated, the Department may require that the owner or operator perform a visible emissions compliance test per Chapter 62-297.310(7)(b), Special Compliance Tests. In addition, Department personnel who are certified to perform visible emissions tests may determine compliance with the general visible emissions standard.}

- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, Maryland 20703-1515

Telephone: 301/429-5018

and,

- **b.** The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]
- 5. <u>Unregulated Emissions Units and Activities.</u> Appendix U-1, List of Unregulated Emissions Units and Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]

- 6. <u>Insignificant Emissions Units and Activities.</u> Appendix I-1, List of Insignificant Emissions Units and Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
- 7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

Nothing was deemed necessary and ordered at this time. [Rule 62-296.320(1)(a), F.A.C.]

- 8. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440. F.A.C.]
- 9. Not federally enforceable. The Permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility. These precautions include receiving delivery of fuel oil by barge rather than trucks, and using paved roads for the fuel trucks which deliver vehicle fuel. Additionally, watering will be used as needed to prevent emissions from unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C.]

10. The Permittee shall submit all compliance, annual operating reports and other correspondence required of this permit to:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555 Fax: 407/897-2996

11. Any reports, data, notification, certifications, and requests required to be sent to the United States Environmental Protection Agency should be sent to:

United States Environmental Protection Agency

Region 4

Air, Pesticides, & Toxics Management Division Air and EPCRA Enforcement Branch, Air Enforcement Section

61 Forsyth Street Atlanta, Georgia 30303 Telephone: 404/562-9155 Fax: 404/562-9163

12. <u>Statement of Compliance</u>. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

13. <u>Certification by Responsible Official (RO)</u>. In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

# Section III. Emissions Unit Conditions

#### Subsection A. Fossil Fuel Steam Boilers

E.U. ID	,
No.	Brief Description
001	87 MW Unit No. 1 Boiler
002	188 MW Unit No. 2 Boiler
003	328 MW Unit No. 3 Boiler

Emissions units 001, 002, and 003 consist of three Combustion Engineering Steam Generators. The boilers may burn a variable combination of natural gas, propane, No. 6 and No. 2 fuel oils, and onspecification used oil. Emissions units 001 and 002 share a common stack, with a height of 300 feet. Emissions unit 003 has a separate 300 foot stack. Unit 001 began operation on February 1, 1960; Unit 002 on September 1, 1964; and Unit 003 on February 1, 1974. Compliance assurance monitoring (CAM) does not apply to these emissions units because there are no add-on pollution control devices installed.

{Permitting note: The emissions units are regulated under Acid Rain-Phase II, and Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input - Rule 62-296.405, F.A.C. and AO05-183384}

# The following conditions apply to the emissions units listed above:

#### **Essential Potential to Emit (PTE) Parameters**

**A.1.** Permitted Capacity. The maximum operating heat input rate is as follows:

Unit No.	Fuel Type	MMBtu/Hour
1	Natural Gas	865.5
1	Oil	832.2
2	Natural Gas	2248.7
2	Oil	2016.5
3	Natural Gas	3208.5
3	Oil	3048.8

Additionally, on-specification used oil may be fired at the rate of the lesser of:

- a. Up to 1.5 million gallons per year; or
- b. the equivalent heat input of 10 percent or less of the permitted heat input of No. 6 Fuel Oil while combusting either No. 6 Fuel Oil or Natural Gas.

{Permitting note: See Specific Condition A.38.}

[Rules 62-4.160(2), 62-210.200 (PTE), and 62-296.405, F.A.C.]

{Permitting note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.} [Rule 62-4.160(2), and Rule 62-297.310(2), F.A.C.]

- **A.2.** Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **A.21**. [Rule 62-297.310(2), F.A.C.]
- **A.3.** Methods of Operation Fuels. The only fuels allowed to be burned are No. 2 fuel oil, No. 6 residual oil, natural gas, propane, and on-specification used oil. Magnesium based fuel oil additives

Reliant Energy Indian River, L.L.C.

## Reliant Energy Indian River Plant

may be used when firing No. 6 residual oil to control soot formation and particulate matter emissions. The used oil shall comply with the limits given in Specific Condition A.38. Off-specification used oil shall not be burned.

[Rules 62-4.160(2), 62-210.200, 62-213.440(1), F.A.C.; AO05-183384; Consent Order OGC File No. 92-0546; and Administrative Permit Correction 0090196-002-AV.]

A.4. Hours of Operation. These emissions units may operate 8,400 hours per year. The facility is required to keep daily records of the operating hours and associated fuel use. [Rules 62-210.200 and 62-213.440(1)(b)1.b., F.A.C., (PTE)]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions A.5. through A.10. are based on the specified averaging time of the applicable test method.}

**A.5.** <u>Visible Emissions - Steady State</u>. Visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions standard shall compliance test for particulate matter emissions annually.

[Rule 62-296.405(1)(a), F.A.C. and Order OGC File Nos. 88-1257, 88-1258, and 88-1259 dated March 13, 1989.]

**A.6.** <u>Visible Emissions - Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3 hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than four, six-minute periods, during the three-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors.

[Rule 62-210.700(3), F.A.C.]

- A.7. Particulate Matter Steady State. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(b), F.A.C.]
- **A.8.** Particulate Matter Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- A.9. <u>Sulfur Dioxide</u>. Sulfur dioxide emissions when burning liquid fuel shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(c)1.j., F.A.C.]

# Reliant Energy Indian River Plant

A.10. Sulfur Dioxide - Sulfur Content. The as-fired sulfur content of the fuels shall not exceed 2.5 percent, by weight. See Specific Conditions A.14., A.19., and A.20. [Rule 62-296.405(1)(e)3., F.A.C.]

#### **Excess Emissions**

- **A.11.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **A.12.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[Rule 62-210.700(2), F.A.C.]

**A.13.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

#### Monitoring Requirements

**A.14.** Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit. Reliant Energy Indian River, L.L.C., (Reliant Energy) will perform a daily sulfur content analysis of the as-fired fuel. See Specific Condition **A.33**. for recordkeeping requirements. This protocol is allowed since the emissions unit has no operating flue gas desulfurization device. See Specific Conditions **A.19**., and **A.20**. [Rule 62-296.405(1)(f)1.b., F.A.C.]

# A.15. Determination of Process Variables.

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

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

#### **Test Methods and Procedures**

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **A.16.** <u>Visible Emissions</u>. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See Specific Condition **A.17**. [Rule 62-296.405(1)(e)1., F.A.C.]
- **A.17.** <u>DEP Method 9</u>. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
- 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
- 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
  - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
  - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]

- A.18. Particulate Matter. The test method for particulate emissions shall be EPA Method 17 incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. Reliant Energy may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 17. [Rule 62-296.405(1)(e)2., F.A.C.]
- A.19. <u>Sulfur Dioxide</u>. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that

exceedances of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test methods referenced above to demonstrate compliance; however, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit. Reliant Energy Indian River, L.L.C., will perform a daily analysis of the as-fired fuel. See Specific Condition A.20. [Rules 62-296.405(1)(e)3., 62-297.620, F.A.C.]

- **A.20.** The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure:
  - a. Determine and record the **as-fired** fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions).
  - b. Record daily the amount of each fuel fired, the density of each fuel, and the percent sulfur content by weight of the as-fired fuel.
  - c. Utilize the information in a. and b., above, to calculate the SO<sub>2</sub> emission rate to ensure compliance at all times.

{Permitting note: The density of each fuel (required by Specific Condition A.20.b) may be obtained by using appropriate data from the in use fuel flow monitors that measure mass flow.}

[Rules 62-297.440, and 62-297.620(2)(d), F.A.C.]

- **A.21.** Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- **A.22.** The particulate matter and visible emissions test shall be conducted concurrently. [Rule 62-4.070(3), F.A.C., and AO05-183384]
- A.23. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities. (See attachment.)
  [Rule 62-297.310(6), F.A.C.]
- **A.24.** <u>Frequency of Compliance Tests</u>. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

  (a) <u>General Compliance Testing</u>.
  - 1. (Not applicable)
  - 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to 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 fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), a formal compliance test shall be conducted for:
  - a. Visible emissions;
  - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
  - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
- 6. (Not applicable)
- 7. (Not applicable)
- 8. (Not applicable)
- 9. (See Specific Condition A.37.)
- 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

[Rule 62-297.310(7)(a)2., 3., 4., 5., 9., 10., F.A.C.; SIP approved]

**A.25.** The Permittee shall conduct a compliance test on an *annual basis* for each of the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

Particulate Matter (PM/PM<sub>10</sub>) - EPA Method 5 or 17 (see Specific Condition A.18.). 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.

[Rule 62-297.310(7)(a)4. & 5., F.A.C.; and Administrative Permit Correction clerked on February 19, 2002.]

- **A.26.** The Permittee shall conduct a compliance test for each of the following pollutants *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 this requirement. 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 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. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.
  - a) Sulfur Dioxide (SO<sub>2</sub>) EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- b) Particulate Matter (PM/PM<sub>10</sub>) EPA Method 5 or 17 (see Specific Condition **A.18.**). [Rule 62-297.310(7)(a)3., F.A.C.; and Administrative Permit Correction clerked on February 19, 2002.]
- A.27. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of Reliant Energy, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

**A.28.** Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

#### A.29. Applicable Test Procedures.

- (a) Required Sampling Time.
  - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
  - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
    - a. (not applicable)
    - b. (not applicable)
    - 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.

## Reliant Energy Indian River Plant

- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. 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) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.]
- **A.30.** Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require Reliant Energy 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. [Rule 62-297.310(7)(b), F.A.C., SIP approved]
- A.31. Waiver of Compliance Test Requirements. If Reliant Energy 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)(c), F.A.C., SIP approved]
- **A.32.** COMS for Periodic Monitoring. Reliant Energy shall install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. Reliant Energy shall maintain and operate the COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring.

[Rule 62-213.440, F.A.C., and applicant requested]

#### Reporting and Recordkeeping Requirements

- A.33. On a quarterly basis, Reliant Energy shall submit a report showing the types of fuels burned. Also, state the sulfur content of the as-fired fuel, recorded from the daily analysis required of Specific Condition A.19. The records shall be maintained for a minimum of five years and shall be made available to the Department upon request. The permittee shall submit a copy of the fuel oil analysis for the fuel oil burned during each compliance test with the results from the test. [Rule 62-4.070(3), F.A.C., and AO05-183384]
- **A.34.** <u>Malfunction Reporting</u>. In the case of excess emissions resulting from malfunctions, the permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

# Reliant Energy Indian River Plant

A.35. Quarterly Excess Emissions Reporting Requirements. Submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the permittee of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-296.405(1)(g), F.A.C.]

## A.36. Test Reports - General Requirements.

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

# 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge. [Rule 62-297.310(8), F.A.C.]

**A.37.** Notification. Reliant Energy 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. [Rule 62-297.310(7)(a)9., F.A.C.]

# **Miscellaneous Conditions**

- **A.38.** <u>Used Oil</u>. Burning of on-specification used oil is allowed by these emissions units in accordance with all other conditions of this permit and the following conditions:
  - a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn only on-specification used oil, which contains a PCB concentration of less than 50 ppm. "On-specification" used oil is defined as used oil that meets the specifications of 40 CFR 279.11, Table 1, Standards for the Management of Used Oil, as listed below. "Off-specification" used oil shall not be burned. Used oil which exceeds any of the allowable levels of the constituents and properties in the following table is considered off-specification used oil.

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	100 degrees F minimum	

- b. Quantity Limitation: No more than 1.5 million gallons of on-specification used oil may be burned during any federal fiscal year.
- c. <u>PCB Limitation</u>: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- d. Operational Requirements: On-specification used oil with a PCB concentration of greater than or equal to 2, and less than 50 ppm shall be burned only at normal source operating temperatures. Used oil with a PCB concentration of greater than or equal to 2 ppm shall not be burned during periods of startup or shutdown.
- e. <u>Testing Requirements</u>: For used oil generated on-site, Reliant Energy shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs. Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

F or used oil obtained off-site, Reliant Energy shall receive from the marketer, for each load of used oil received, a *certification* that the used oil meets the criteria for on-specification

used oil and contains a PCB concentration of no greater than 49 ppm. This certification shall also describe the basis for the certification, such as analytical results. Any claim that used oil does not contain quantifiable levels of PCBs (that is, the used oil contains less than 2 ppm of PCBs) must be documented by testing or other information. The first person making that claim is responsible for furnishing the documentation. The documentation can be tests, personal or special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that it contains no detectable PCBs. If Reliant Energy does not receive certification from the marketer as described above, they must sample and test each load of used oil as outlined above for on-site testing. If Reliant Energy relies on the certification from the marketer, Reliant Energy shall, at a minimum, each calendar quarter, test one load of the used oil received, selected at random, for the above parameters. If the analytical results show that the used oil does not meet the "onspecification" criteria, or that it contains PCB's of 50 ppm or greater, Reliant Energy shall immediately notify and provide these results to the Department's Central District Office and immediately stop burning the used oil.

- f. <u>Recordkeeping Requirements</u>: Reliant Energy shall obtain, make, and keep the following records for used oil in a form suitable for inspection by the Department:
  - (1) The gallons of on-specification used oil generated and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
  - (2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)
  - (3) The name and address of all marketers delivering used oil to the facility.
  - (4) Copies of the marketer certifications and any supporting information.
  - (5) Documentation that the used oil contains less than 2 ppm PCBs, if claimed, including the name and address of the person making the claim.
  - (6) Results of the analyses required above.
  - (7) A copy of the notice to EPA and a copy of the one-time written notice provided to each marketer.
  - (8) Total lead emissions as a result of burning on-specification used oil on a monthly basis.
- g. <u>Reporting Requirements</u>: Reliant Energy shall submit to the Department, within thirty days of the end of each calendar quarter, the analytical results and the total amount of onspecification used oil generated and burned during the quarter.

Reliant Energy shall submit, with the Annual Operation Report form, the analytical results and the total amount of on-specification used oil burned during the previous calendar year.

[Rule 62-4.070(3), F.A.C., and 40 CFR 279 and 40 CFR 761]

## Subsection B. Lime Storage Silo

E.U. ID	
No.	Brief Description
008	Lime Storage Silo

Emissions unit 008 is a lime storage silo filling system. The silo is equipped with a fabric filter baghouse made by General Resource Corporation, Model 13204.8. The baghouse is approximately 99 percent efficient in controlling particulate matter emissions. This source is located at the water treatment building. The silo began operation on February 25, 1993. Compliance assurance monitoring (CAM) does not apply to this emissions unit because the pre-control potential to emit particulate matter is below the threshold amount of 100 tons per year.

# Essential Potential to Emit (PTE) Parameters

#### B.1. Capacity.

- (a) This silo is permitted to be loaded 14 hours per week.
- (b) The maximum permitted loading rate is ten (10) tons per hour.
- (c) The facility is required to keep records of the operating hours and loading rate. [Rules 62-4.160(2), 62-210.200 (PTE), 62-213.440(1)(b)1.b., F.A.C., and AO05-229996]

### **Emission Limitations and Standards**

{Permitting note: Unless otherwise specified, the averaging times for Specific Condition **B.2.** are based on the specified averaging time of the applicable test method.}

- **B.2.** (a) No owner or operator of an emissions unit source governed by Rule 62-296.711, F.A.C., shall cause, permit, or allow any visible emissions (five percent opacity) from such emissions unit.
- (b) If, in order to comply with the requirements of paragraph (a) above, it is necessary to totally or partially enclose an operation and exhaust particulate laden gases through a vent or stack, emissions of particulate from such vent or stack shall not exceed 0.03 gr/dscf.
- (c) An owner or operator may request the Department to determine that the emission standards of Rule 62-296.711(2)(a) and (b), F.A.C., do not constitute RACT for a facility. If the Department finds that the emission standards do not represent RACT, the Department shall make a determination of RACT for that facility.

[Rule 62-296.711, F.A.C.]

- **B.3.** <u>Unconfined Emissions.</u> Particulate matter emissions from plant grounds, including the transfer point at which materials are loaded into trucks shall be subject to the following:
- a) Area must be watered down should unconfined emissions occur.
- b) The loading operation shall be maintained and properly operated.

[Rule 62-296.320(4)(c), F.A.C., and AO05-229996]

# **Test Methods and Procedures**

- **B.4.** (a) An annual test method for visible emissions shall be performed. The test method shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
- (b) A visible emissions test indicating no visible emissions (5 percent opacity) may be submitted in lieu of a particulate stack test for materials handling emissions units subject to this rule, where the emissions unit is equipped with a baghouse.
  - (c) The permittee must perform and record the results of a qualitative observation of opacity

# Reliant Energy Indian River Plant

- (40 C.F.R. Part 60, Method 22) at least once on each day while the loading operations are taking place. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted during lime loading operations, within 24 hours of the qualitative survey. If lime filling does not occur within 24 hours of the detected visible emission, a Method 9 survey shall occur at the next time the silo is loaded.
- (d) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rules 62-213.440(1)(b)1.b. and 62-297, F.A.C.]
- **B.5.** <u>DEP Method 9</u>. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
- 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
- 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
  - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
  - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.

[Rule 62-297.401, F.A.C.]

**B.6.** Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operation rate allowed by permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rule 62-297.310(2), F.A.C.]

#### **B.7.** Required Sampling Time.

Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential

# Reliant Energy Indian River Plant

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: For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time. [Rule 62-297.310(4)(a)(2)a., F.A.C.]

**B.8.** During compliance testing, the silo must be operated at the highest pressure and filling rate ever intended to be used. The process rate achieved during the compliance test must be recorded on the visible emission test report.

[Rule 62-4.070(3), F.A.C., and AO05-229996]

### Reporting and Recordkeeping

**B.9.** Reliant Energy Indian River, L.L.C. 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 Reliant Energy.

[Rule 62-297.310(7)(a)9., F.A.C.,]

**B.10.** The required test report shall be filed with this office as soon as practical but no later than 45 days after the last sampling run of each test is completed.

Each calendar year on or before March 1, submit an Annual Operations Report DEP Form 62-210.900(4) for the preceding calendar year.

[Rule 62-297.310(8)(b), F.A.C, and AO05-229996]

**B.11.** Reliant Energy Indian River, L.L.C., shall keep records of the operating hours and process loading rate of the lime storage silo to ensure continuous compliance with the limits in Specific Condition **B.1.** 

[Rules 62-4.160(2), 62-210.200 (PTE), and 62-4.070(3), F.A.C.]

## **Qualitative Opacity Monitoring**

**B.12.** Reliant Energy Indian River, L.L.C., shall perform and record the results of a qualitative observation of opacity (40 CFR 60, Method 22) at least once on each day while the loading operations are taking place. The records of these observations should indicate whether or not any visible emissions are detected and include color, duration and density of the plume, as well as the cause and corrective action taken for any visible emissions. If a visible emission is detected, corrective action should be taken and a Method 9 observation shall be conducted during lime loading operations, within 24 hours of the qualitative survey. If lime loading does not occur within 24 hours of the detected visible emission a Method 9 observation shall be conducted the next time the silo is loaded. {Permitting note: It is presumed that the threshold of visibility for opacity is equal to 5%.} [Rules 62-213.440 and 62-4.070(3), F.A.C.]

#### IV. Acid Rain Part

Reliant Energy Indian River Plant

Operated by: Reliant Energy Indian River, L.L.C.

ORIS code: 55318

The emissions units listed below are regulated under Acid Rain Part, Phase II.

E.U. ID No.	Description
001	87 MW Unit No. 1 Boiler
002	188 MW Unit No. 2 Boiler
003	328 MW Unit No. 3 Boiler

- 1. The Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
- a. DEP Form No.62-210.900(1)(a), version 06/16/03, dated May 17, 2004, by the Designated Representative.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations for each Acid Rain unit are:

E.U. ID No.	EPA ID#	Year	2005	2006	2007	2008	2009
001	1 IRP1	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	1192*	1192*	1192*	1192*	1192*
002	2 IRP2	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	1569*	1569*	1569*	1569*	1569*
003	3 IRP3	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	3646*	3646*	3646*	3646*	3646*

<sup>\*</sup>The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the US EPA under Table 2 of 40 CFR 73.

- 3. <u>Emission Allowances</u>. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

# Reliant Energy Indian River Plant

- 4. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-4, Title V Conditions.} [Rule 62-214.420(11), F.A.C.]
- 5. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

# Appendix U-1, List of Unregulated Emissions Units and Activities

Reliant Energy Indian River, L.L.C.

Permit No. 0090196-005-AV

# **Reliant Energy Indian River Plant**

<u>Unregulated Emissions Units and Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and activities are neither 'regulated emissions units' nor 'exempt emissions units'.

E.U.			
ID No.	Brief Description of Emissions Units and Activities		
009	Three No. 6 Fuel Oil Storage Tanks		
	(two with 3.67 million gallon capacity, one with 7.5 million gallon capacity)		
	No. 2 Fuel Oil Storage Tank		
	(34,500 gallon capacity)		
	One Gasoline Fuel Storage "day" Tank (500 gallon capacity)		
	Fuel loading and unloading activities		

# Appendix I-1, List of Insignificant Emissions Units and Activities

Reliant Energy Indian River, L.L.C.

Permit No. 0090196-005-AV

# Reliant Energy Indian River Plant

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

### **Brief Description of Emissions Units and Activities**

- 1. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
- 2. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 CFR Part 82.
- 3. Vacuum pumps in laboratory operations.
- 4. Equipment used for steam cleaning.
- 5. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
- 6. Equipment used exclusively for space heating, other than boilers.
- 7. Laboratory equipment used exclusively for chemical or physical analyses.
- 8. Brazing, soldering or welding equipment.
- 9. One or more emergency generators located within a single facility provided:
  - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
  - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 10. One or more heating units and general purpose internal combustion engines located within a single facility provided:
  - a. None of the heating units or general purpose internal combustion engines is subject to the Federal Acid Rain Program; and
  - b. Total fuel consumption by all such heating units and general purpose internal combustion engines within the facility is limited to 32,000 gallons per year of diesel

fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

- 11. Fire and safety equipment.
- 12. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
  - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
  - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
- 13. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
- 14. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

Note: No exemption shall be granted to any emissions unit or activity if:

- 1. Such unit or activity would be subject to any unit-specific applicable requirement;
- 2. Such unit or activity, in combination with other units and activities proposed for exemption, would cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); or
- 3. Such unit or activity would emit or have the potential to emit:
- a. 500 pounds per year or more of lead and lead compounds expressed as lead;
- b. 1,000 pounds per year or more of any hazardous air pollutant;
- c. 2,500 pounds per year or more of total hazardous air pollutants; or
- d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C]

# **Appendix H-1, Permit History/ID Number Changes**

Reliant Energy Indian River, L.L.C. Reliant Energy Indian River Plant

Permit No. **0090196-005-AV** Facility ID No. **0090196** 

Permit History:

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date
001, 002, & 003	Boiler Units No. 1, 2, & 3	OGC FILE NO.	03/13/89	
		88-1257, 88-1258, & 88-1259	•	
		AO05-183384	04/26/91	04/15/96
		0090008-001-AV	01/01/00	12/31/04
		0090196-001-AV	01/30/01	12/31/04
		(Initial Title V Permit)		
		0090196-002-AV	07/25/03	
		(Administrative Permit		
		Correction)		
		(Administrative Permit	02/19/02	
		Correction)		
		0090196-003-AC	Withdrawn	
		0090196-004-AV	Withdrawn	
008	Lime Storage Silo	AO05-229996	06/03/93	05/30/98
		0090008-001-AV	01/01/00	12/31/04
		0090196-001-AV	01/30/01	12/31/04
		(Initial Title V Permit)		

# ID Number Changes:

From: Facility ID No. 30ORL050008

To: Facility ID No. 0090008

From: Facility ID No. 0090008
To: Facility ID No. 0090196

# Table 1-1, Summary of Air Pollutant Standards and Terms

Reliant Energy Indian River, L.L.C.

Permit # 0090196-005-AV Facility ID # 0090196

Reliant Energy Indian River Plant

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 001, 002, 003

Boilers 1, 2, and 3

			Allowable-Emissions Equivalent Emissions*		Emissions*	] [	See Permit		
Pollutant/Paramete	Fuel	Hours/Year	Standards	lbs./hour	TPY	lbs./hour	TPY .	Regulatory Citations	Condition
SO2	All	8,400	2.75 lbs/MMBtu					Rule 62-296.405(1)(c)1.j	III. A.9
РМ	All		0.1 lbs/MMBtu 0.3 lbs/MMBtu for 3hr. per 24 hours (sootblowing)					Rule 62-296.405(1)(b) Rule 62-210.700(3)	III. A.7 III. A.8
VE	All		20%; 40%@ 2min/hr. 60% for 3hr./24 hours (sootblowing)				n/a	Rule 62-296.405(1)(a) Rule 62-210.700(3)	III. A.5 III. A.6

<sup>\*\* --</sup> Annual emissions (TPY) based on 3 hours per day at 0.3 lb/mmBtu and 21 hours per day at 0.1lb/MMBtu.

<sup>\* --</sup> Equivalent Emissions provided for information only.

# Table 1-1, Summary of Air Pollutant Standards and Terms

Reliant Energy Indian River, L.L.C. Reliant Energy Indian River Plant

Permit # 0090196-005-AV Facility ID # 0090196

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 008

Lime Storage Silo

		Allowable Emissions Equivalent Emissions		t Emissions		See Permit
Pollutant	Process Rate		lbs./hour	TPY	Regulatory Citations	Condition
Particulate Matter	10 tons per hour	0.03 gr/dscf	n/a	n/a	Rule 62-296.711	III.B.2.
Visible Emissions	10 tons per hour	5% Opacity	n/a	n/a	Rule 62-296.711	III.B.2.

# Table 2-1, Summary of Compliance Requirements

Reliant Energy Indian River, L.L.C. Reliant Energy Indian River Plant

Permit # 0090196-005-AV Facility ID # 0090196

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 001, 002, 003

Boilers 1, 2, and 3

	_		Frequency	Frequency	Min. Compliance		
Pollutant/		Compliance	of	Base	Test		Permit
Parameter	Fuel	Method	Sampling	Date *	Duration	CMS**	Condition
SO2	All Fuels	Fuel sampling & analysis	Daily sampling of as-fired fuel	1-Oct			III. A.19
PM	All Fuels	EPA Method 5 or 17	annual	001: 1-Oct 002 & -003: 23-Aug			III. A.18
VE	All Fuels	DEP Method 9	annual	001: 1-Oct 002 & -003: 23-Aug	1 hour		III. A.16

<sup>\*</sup>Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>\*\*</sup>CMS = continuous monitoring system

# Table 2-1, Summary of Compliance Requirements

Reliant Energy Indian River, L.L.C. Reliant Energy Indian River Plant

Permit # 0090196-005-AV Facility ID # 0090196

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 008

Lime Storage Silo

			Frequency	Frequency	Min. Compliance		
Pollutant/		Compliance	of	Base	Test		Permit
Parameter	Material	Method	Sampling	Date*	Duration	CMS**	Condition
PM VE	Lime Lime	VE Test in lieu of PM test since source has baghouse DEP Method 9		1-Mar 1-Mar	30 minutes or one batch cycle 30 minutes or one batch cycle	n/a	III.B.4.

<sup>\*</sup>Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>\*\*</sup>CMS = continuous monitoring system

# Friday, Barbara

To:

Kozlov, Leonard; adeese@reliant.com

Cc:

Cascio, Tom

Subject: FINAL Title V Permit Renewal No. 0090196-005-AV - Reliant Energy Indian River, L.L.C.

Attached for your records is a zip file which contains the FINAL Title V Permit Renewal and associated documents.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday Planner II Bureau of Air Regulation (850)921-9524 Barbara.Friday@dep.state.fl.us