

EV 990402

CERTIFIED MAIL

February 04, 1999

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BUREAU OF
AIR REGULATION

Mr. Hamilton Oven, P.E.
Administrator, Power Plant Siting
Florida Dept. of Environmental Protection
2600 Blair Stone Rd.
Mail Station 48
Tallahassee, FL 32399-2400

RE: St. Johns River Power Park (SJRPP)
Jacksonville Electric Authority (JEA)
Conditions of Certification PA 81-13
Emissions of Particulate Matter (PM) and Nitrogen Oxides (NOx)
Compliance Certification

Dear Mr. Oven:

Pursuant to Specific Condition I.A.2.g. of the above referenced Conditions, the permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially fired with petroleum coke, information demonstrating in accordance with 40 CFR 52.21 (b)(21)(v) and 40 CFR 52.21 (b)(33) that operational changes did not result in emissions increases of nitrogen oxides and particulate matter.

Please find attached the analysis results, as prepared by Kennard Kosky, P.E. (Golder Associates), comparing baseline emissions when firing coal for the two years prior to co-firing (i.e. 1994/1995) petroleum coke and coal with 1998 co-firing emissions. The 1998 emission rates for PM and NOx were less than the baseline emissions of coal only, which would confirm that significant net increase in emissions did not result from co-firing petroleum coke and coal. Therefore, SJRPP Units 1 & 2 have complied with the above referenced Specific Condition.

Please contact me at (904)665-8729 if you have any questions or require any additional information regarding this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Worley".

Jay Worley
Director, Environmental & Safety

xc: E. Frey, (FDEP)
A. Linero, (FDEP) ✓
W. Tutt, (RES D)
S. Pace, (RES D)

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



**St. Johns River Power Park (SJRPP)
PSD-FL-010(B); PA 81-13
Co-Firing of Petroleum Coke
Emissions of Particulate and Nitrogen Oxides
Compliance Certification**

This certification addresses the requirements of Specific Condition 3.A. of the Prevention of Significant Deterioration (PSD) permit regarding the increase of emissions when co-firing petroleum coke and coal. As required by Specific Condition 3.A., information must be submitted in accordance with 40 CFR 52.21 (b)(21)(v) and (b)(33) that operational changes did not result in emissions increases of nitrogen oxides (NO_x) and particulate matter (PM). According to 40 CFR 52.21 (b)(33), for an electric steam generating unit the emissions resulting from increased utilization due to electric demand is not included in calculating any emissions increase. Since SJRPP Units 1 and 2 are base load units and their operation is not affected by co-firing petroleum coke and coal, the appropriate comparison is the emissions rates in pounds per million Btu heat input (lb/mmBtu) when co-firing petroleum coke and coal.

The baseline emissions when firing coal for the two years prior to co-firing (i.e., 1994/95) petroleum coke and coal were 0.0154 lb/mmBtu for PM and 0.52 lb/mmBtu for NO_x (reference Annual Operating Reports for 1994 and 1995). Baseline tests performed in July and August, 1995 during the Co-firing Trial Test Burn were 0.00715 lb/mmBtu for PM and 0.498 lb/mmBtu for NO_x. The average NO_x emissions in 1996 while firing predominantly coal was 0.51 and 0.53 lb/mmBtu for Units 1 and 2, respectively.

In 1997, the emissions of PM were 0.005 lb/mmBtu for both Units 1 and 2 and the emissions of NO_x were 0.48 lb/mmBtu for both units. For 1998, the PM emission rates from the annual compliance tests were 0.008 and 0.005 lb/mmBtu, respectively. The NO_x emissions for 1998 were 0.486 and 0.478 lb/mmBtu for Units 1 and 2, respectively. These emissions rates are less than the baseline emissions for coal only which would confirm that a significant net increase in emissions did not result from co-firing petroleum coke and coal. Therefore, SJRPP Units 1 and 2 have complied with the Specific Condition 3.A. of the PSD approval.

Kennard F. Kosky, P.E.
Principal
Florida Professional Engineer License No. 14996
February 1, 1999

SEAL

EV 990402

CERTIFIED MAIL

February 04, 1999

Mr. Hamilton Oven, P.E.
Administrator, Power Plant Siting
Florida Dept. of Environmental Protection
2600 Blair Stone Rd.
Mail Station 48
Tallahassee, FL 32399-2400



RE: St. Johns River Power Park (SJRPP)
Jacksonville Electric Authority (JEA)
PSD -FL-010(B)
Conditions of Certification PA 81-13
Emissions of Carbon Monoxide (CO) and Sulfuric Acid Mist (H₂SO₄)
Demonstration of No Significant Emissions Increase - Compliance Certification

Dear Mr. Oven:

Pursuant to PSD Condition 3.B. and Specific Condition I.A.2.h. of the above referenced Conditions, "the permittee shall maintain and submit to the Department on a semiannual basis for a period of two years from the date the unit is initially fired with petroleum coke, and then on an annual basis (if the first two years of data show no significant increase in carbon monoxide emissions) for an additional three years, information changes did not result in a significant increase of carbon monoxide". In addition, pursuant to PSD Condition 3.C. and Specific Condition I.A.2.i. of the Conditions, "the permittee shall maintain and submit to the Department on a semiannual basis for a period of two years from the date a unit is initially co-fired with petroleum coke, information demonstrating that the operational changes did not result in significant increases of sulfuric acid mist.

Please find attached the analysis results, as prepared by Kennard Kosky, P.E. (Golder Associates). Mr. Kosky concludes that the data indicate that CO emissions from co-firing petroleum coke with coal are not significantly different from firing coal only and that there has not been an increase in CO emissions as a result of co-firing petroleum coke with coal. Therefore, SJRPP Units 1 & 2 have complied with PSD 3.B. and Specific Condition I.A.2.h. of the above referenced Conditions and will now reduce from semiannual CO emission testing and data submittal to annual testing and submittal for the next three years.

In addition, Mr. Kosky concludes that these data confirm that a significant net increase in sulfuric acid mist emissions has not resulted from co-firing petroleum coke and coal over the two year period from the date the units were initially co-fired with petroleum coke. Therefore, SJRPP Units 1 & 2 have complied with PSD Condition 3.C. and Specific Condition I.A.2.i. of the above referenced Specific Condition.

Please contact me at (904)665-8729 if you have any questions or require any additional information regarding this request.

Sincerely,


Jay Worley
Director, Environmental & Safety

xc: E. Frey, (FDEP)
A. Linero, (FDEP)
W. Tutt, (RESO)
S. Pace, (RESO)

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



**St. Johns River Power Park (SJRPP)
PSD-FL-010(B); PA 81-13
Co-Firing of Petroleum Coke
Emissions of Sulfuric Acid Mist and Carbon Monoxide
Compliance Certification**

This certification addresses the requirements of Specific Conditions 3.B. and 3.C. of the Prevention of Significant Deterioration (PSD) permit regarding the increase of emissions when co-firing petroleum coke and coal. As required by Specific Conditions 3.B. and 3.C., information must be submitted over a period of two years to demonstrate that operational changes did not result in emissions increases of Sulfuric Acid Mist (H_2SO_4) and Carbon Monoxide (CO). In accordance with 40 CFR 52.21 (b)(21)(v) and (b) (33) and 40 CFR 52.21 (b) (33), for an electric steam generating unit the emissions resulting from increased utilization due to electric demand is not included in calculating any emissions increase. Since SJRPP Units 1 and 2 are base load units and their operation is not affected by co-firing petroleum coke and coal, the appropriate comparison is the emissions rates when co-firing petroleum coke with coal and firing coal only.

H_2SO_4

The results of tests to determine H_2SO_4 emissions are summarized in Table 1- H_2SO_4 . This includes the baseline coal tests that were performed in July and August, 1995 during the Co-firing Trial Test Burn and in January and February 1997 while the permit was under review. Also presented in Table 1- H_2SO_4 , are tests conducted in 1997 and 1998 while co-firing petroleum coke with coal. The tests conducted in early 1997 were a result of the Sierra Club agreement and generated information for coal only and co-firing petroleum coke with coal.

The procedure used to evaluate all the H_2SO_4 data was that provided in 40 CFR Part 60 Appendix C for determining an emission change under EPA New Source Performance Standard (NSPS) regulations. The upper and lower confidence intervals are determined using Student's "t" test which is commonly used to compare the means of small sample sizes. This procedure can account for operational variability associated with emission rates and provide a statistical comparisons for determining whether differences between mean values exist at a specified confidence level.

Table 1- H_2SO_4 also presents the 95 percent confidence intervals of the mean values. Table 2- H_2SO_4 presents a summary. The results of the baseline tests found average emissions of 7.01 ppm while firing coal. The emissions rates when co-firing petroleum coke with coal were, on the average, 5.55 ppm or about 20 percent less than the baseline emissions for coal only over the two year period (1997-98). The statistical evaluation shows that there is no significant difference between the means of the coal only tests and the tests conducted while co-firing petroleum coke and coal. This conclusion applies to whether each year are

evaluated against the coal only tests (i.e., 1997 or 1998) or whether the data is evaluated against either unit (i.e., Unit 1 or Unit 2). These data would confirm that a significant net increase in emissions has not resulted from co-firing petroleum coke and coal over the two year period from the date the units were initially co-fired with petroleum coke. Therefore, SJRPP Units 1 and 2 have complied with the Specific Condition 3.C. of the PSD approval.

CO:

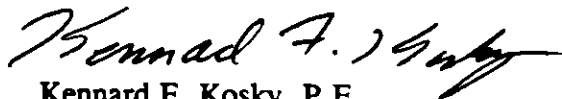
As provided to the Department during the permit review for co-firing petroleum coke with coal, the comparisons of CO emissions for coal only and those during the co-firing test burn were confounded by the variability of CO emissions that normally occur when using any fuel and the lack of combustion adjustments made during the test burn. The latter resulted in higher CO emissions which could have been ameliorated if fine tuning of the combustion process, specific to the co-firing of petroleum coke with coal, had been performed. Such fine tuning would have improved the combustion process while concomitantly producing lower CO emissions. As required in the Department's approval to co-fire petroleum coke with coal, Specific Condition 3.B. of the PSD permit required that EPA Method 10 and CEMS data for CO be submitted and used for the comparisons. Due to the variability in CO concentration during normal operation, CEMS data are most appropriate for evaluating differences between firing only coal and co-firing petroleum coke with coal.

CEMS data for 1998 indicated no significant periods of coal only operation from which comparison could be made. Moreover, in February 1998, the data range on the CEM was changed from 500 ppm to 2,000 ppm. This had the effect of increasing the average CO concentrations, since the very high peak values (> 500 ppm) were not previously recorded. The data for 1996 were also evaluated for use in determining baseline CO concentrations for firing coal only. However, starting in January 1997, SJRPP elected, under the EPA Title IV Acid Rain program, to reduce emissions of NOx thereby confounding the ability to compare data from 1996 with data from 1997. In general, reductions in NOx are followed by an increase in CO concentrations. Indeed, small decreases in NOx concentrations can effect large increases in CO. Therefore, the best data set to evaluate whether the co-firing of petroleum coke with coal resulted in an increase of CO concentrations was the use of the 1997 CO CEMS data. The results are summarized below.

Fuel-Unit	CO Emission Rates (lb/mmBtu)		
	Upper Confidence <u>Interval</u>	<u>Mean</u>	Lower Confidence <u>Interval</u>
Coal - Unit 1	0.561	0.303	0.045
Pet Coke & Coal Unit 1	0.166	0.151	0.135
Coal - Unit 2	0.150	0.122	0.093
Pet Coke & Coal Unit 2	0.146	0.133	0.119

The data represent the averages of daily CO emission rates as provided by the CEMS for both Units 1 and 2 when firing only coal and when co-firing petroleum coke with coal. The upper and lower confidence intervals are also shown, since there is considerable operational variability associated with the daily CO emission rates and such comparisons are appropriate for determining differences between mean values. The procedure used is identical to that provided in 40 CFR Part 60 Appendix C for determining an emission change under EPA regulations.

As shown in the above table, the CO values observed for each unit when co-firing petroleum coke and coal are within the observed ranges when firing only coal. Indeed, the means for both units indicate that firing coal alone would have an emission rate of 0.213 lb/mmBtu, while co-firing petroleum coke with coal would have an emission rate of 0.142 lb/mmBtu. Stack tests using EPA Method 10 were also conducted during the two year period (1997-98) while co-firing petroleum coke with coal. These results are presented in Table 1-CO and show that the average emissions are within the values reported for coal from the CEM data. Taken together, the data indicate that CO emissions from co-firing petroleum coke with coal are not significantly different from firing coal only and that there has not been an increase CO emissions as a result of co-firing petroleum coke with coal.



Kennard F. Kosky, P.E.
Principal
Florida Professional Engineer License No. 14996
February 1, 1999

SEAL



Table 1-H₂SO₄. Summary of Coal and Co-Firing Test Data for Sulfuric Acid Mist

Fuel	Date	Unit	H ₂ SO ₄ (ppm) ^a	Number of Data	Upper C.I.	Lower C.I.
Coal	1995 ^b	1	6.19			
	Jan-97	1	6.68			
	Feb-97	1	8.15			
		Average:	7.01	3	8.73	5.29
		Std. Dev.	1.02			
Coal/Pet Coke	Jan-97	1	5.78			
	Feb-97	1	2.86			
	6/4/97	1	4.08			
	6/5/97	2	5.62			
	11/3/97	1	4.15			
	11/4/97	2	3.59			
	5/19/98	1	7.29			
	5/20/98	2	6.83			
	10/12/98	1	9.83			
	10/13/98	2	5.49			
	2-Year	Average:	5.55	10	6.75	4.36
		Std. Dev.	2.06			
	1997	Average:	4.35	6	5.29	3.40
		Std. Dev.	1.15			
	1998	Average:	7.36	4	9.49	5.22
		Std. Dev.	1.81			
Unit 1	Average:	5.66	6	7.76	3.57	
	Std. Dev.	2.55				
Unit 2	Average:	5.38	4	7.01	3.76	
	Std. Dev.	1.38				

^a All tests consisted of 3 runs except 10/12/98 Unit 1; these tests consisted of 6 runs.

^b Tests conducted in July and August of 1995.

^c Confidence Interval (C.I.) = $x \pm t_{\alpha/2} \times s / (n)^{0.5}$

where: x = average; t = "Students-t" statistic at $n-1$ degrees of freedom (95%)

s = standard deviation; n = number of data points

**Table 2-H₂SO₄. Summary of Coal and Co-Firing
Statistics for Sulfuric Acid Mist**

	Upper C.I.	Mean	Lower C.I.
Coal	8.73	7.01	5.29
Co-Firing Coal and Petroleum Coke:			
1997/98	6.75	5.55	4.36
1997	5.29	4.35	3.40
1998	9.49	7.36	5.22
Unit 1	7.76	5.66	3.57
Unit 2	7.01	5.38	3.76

**Table 1-CO. Summary of Coal and Co-Firing Test Data
for Carbon Monoxide**

Fuel	Date	Unit	CO (lb/mmBtu)
Coal/Pet Coke	6/4/97	1	0.067
	6/5/97	2	0.114
	11/3/97	1	0.035
	11/4/97	2	0.093
	5/19/98	1	0.278
	5/20/98	2	0.095
	10/12/98	1	0.013
	10/13/98	2	0.032
		Average Unit 1:	0.098
		Average Unit 2:	0.084
		Average Both Units:	0.091
		Average 1997:	0.077
		Average 1998:	0.105

Chuck Pauley

Limestone Unloading Performance Test

Date 2-6-98

<u>Time</u>	<u>CT2 TPH</u>	<u>CT2 Total Tons</u>		
700	<u>1116</u>	<u>4174</u>	842	56% 56%
800	<u>688</u>	<u>5016</u>	592	39% 39%
900	<u>1146</u>	<u>5608</u>	868	58% 58%
1000	<u>1083</u>	<u>6476</u>	881	59% 59%
1100	<u>121</u>	<u>7357</u>	547	36% 36%
1200	<u>1010</u>	<u>7904</u>	731	49% 49%
1300	<u>1168</u>	<u>8635</u>	663	44% 44%
1400	<u>Ø</u>	<u>9298</u>	891	59% 59%
1500	<u>1142</u>	<u>10189</u>	483 483	54% 54%
1600	<u>1158</u>	<u>10672</u>	725 725	75% 75%
1700				
1800				
1900				

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method (Circle One)
 Method 9 203A 2038 Other: _____

Company Name
ST. JOHNS RIVER POWER PARK

Facility Name
ST. JOHNS RIVER POWER PARK

Street Address
11201 NEW BERLIN ROAD

City State Zip
JACKSONVILLE FL 32226

Process Unit # Operating Mode
SHIP UNLOADING LIMESTONE 59% CAPACITY

Control Equipment Operating Mode
WBT SUPPRESSION 0% CAPACITY

Describe Emission Point
SHIP UNLOADER HOPPER

Height of Emiss. Pt. Start 80' End 80' Height of Emiss. Pt. Rel. to Observer Start 35' End 35'

Distance to Emiss. Pt. Start 35' End 35' Direction to Emiss. Pt. (Degrees) Start 315° End 315°

Vertical Angle to Obs. Pt. Start 45° End 45° Direction to Obs. Pt. (Degrees) Start 315° End 315°

Distance and Direction to Observation Point from Emission Point Start 0-0 End 0-0

Describe Emissions Start NONE End NONE

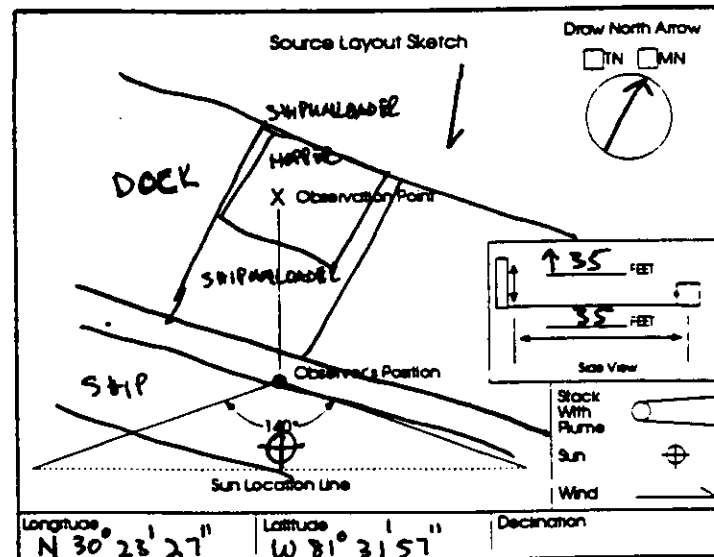
Emission Color Water Droplet Plume Start NONE End NONE Attached Detached None

Describe Plume Background Start OPEN SKY End OPEN SKY

Background Color Sky Conditions Start BLUE End BLUE Start SCATTERED End SCATTERED

Wind Speed Wind Direction Start 0-3 End 0-3 Start NAW End NAW

Ambient Temp. Wet Bulb Temp. RH Percent Start 70°F End 70°F



Additional Information

Form Number 003-1 Page 1 of 2

Continued on VEO Form Number 003-2

Observation Date		Time Zone		Start Time	End Time	Comments
2/6/99		EST		10:00	11:00	
Sec	Min	0	15	30	45	
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2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
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6	0	0	0	0		
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26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print)
MARK K. LOEVELT

Observer's Signature
Mark K. Lovelt Date 2/6/99

Organization
ST. JOHNS RIVER POWER PARK

Certified By
EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method used (Circle One)
 Method 9 203A 203B Other: _____

Company Name
 ST. JOHNS RIVER POWER PARK
 Facility Name
 ST. JOHNS RIVER POWER PARK
 Street Address
 11201 NEW BERLIN ROAD
 City State Zip
 JACKSONVILLE FL 32226

Process Unit # Operating Mode
 SHIP UNLOADING LIMESTONE
 Control Equipment Operating Mode

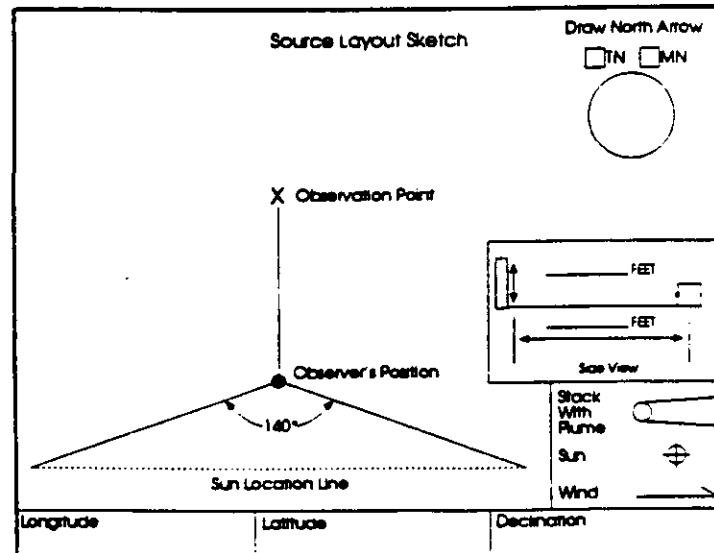
Describe Emission Point
 SHIP UNLOADER HOPPER

Height of Emiss. Pt. Height of Emiss. Pt. Rel. to Observer
 Start End Start End
 Distance to Emiss. Pt. Direction to Emiss. Pt. (Degrees)
 Start End Start End

Vertical Angle to Obs. Pt. Direction to Obs. Pt. (Degrees)
 Start End Start End
 Distance and Direction to Observation Point from Emission Point
 Start End

Describe Emissions
 Start End
 Emission Color Water Droplet Plume
 Start End Attached Detached None

Describe Plume background
 Start End
 Background Color Sky Conditions
 Start End Start End
 Wind Speed Wind Direction
 Start End Start End
 Ambient Temp. Wet Bulb Temp. RH Percent
 Start End



Additional Information

Form Number 003-2 Page 2 of 2
 Continued on VEO Form Number 003-1

Observation Date		Time Zone		Start Time	End Time	Comments
Sec	Min	0	15	30	45	
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27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print)
 MARK K. LOECHLI
 Observer's Signature
 [Signature]
 Organization
 ST. JOHNS RIVER POWER PARK
 Certified By
 EASTERN TECHNICAL ASSOCIATES
 Date
 2/6/98
 Date
 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 006-1 Page 1 of 2
 Continued on VEO Form Number 006-2

Method (Circle One) Method 9 203A 2038 Other: _____

Company Name ST. JOHNS RIVER POWER PARK
 Facility Name ST. JOHNS RIVER POWER PARK
 Street Address 11201 NEW BERLIN ROAD
 City JACKSONVILLE State FL Zip 32226

Process SHIP UNLOADING LIMESTONE Unit # _____ Operating Mode 59% CAPACITY
 Control Equipment WRT SUPPRESSION Operating Mode 0% CAPACITY

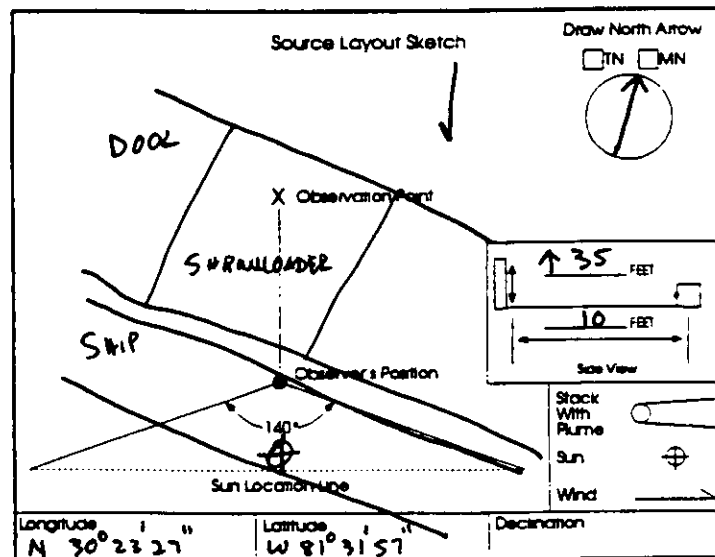
Describe Emission Point TRANSFER POINT HOPPER TO CONVEYOR CT-1

Height of Emiss. Pt. Start 65' End 65' Height of Emiss. Pt. Rel. to Observer Start 10' End 10'
 Distance to Emiss. Pt. Start 35' End 35' Direction to Emiss. Pt. (Degrees) Start 315° End 315°

Vertical Angle to Obs. Pt. Start 15° End 15° Direction to Obs. Pt. (Degrees) Start 315° End 315°
 Distance and Direction to Observation Point from Emission Point Start 0'-0" End 0'-0"

Describe Emissions Start NONE End NONE Emission Color _____ Water Droplet Plume _____
 Start NONE End NONE Attached Detached None

Describe Plume Background Start LIMESTONE HOPPER End LIMESTONE HOPPER Background Color _____ Sky Conditions _____
 Start DARK BLUE End DARK BLUE Start SCATTERED End SCATTERED
 Wind Speed Start 0-3 End 0-3 Wind Direction Start NAW End NAW
 Ambient Temp. Start 70°F End 70°F Wet Bulb Temp. _____ RH Percent _____



Longitude N 30° 23' 27" Latitude W 81° 31' 57" Declination _____

Additional Information _____

Observation No.	Date	Time Zone	Start Time	End Time	Comments
	<u>2/6/99</u>	<u>EST</u>	<u>10:00</u>	<u>11:00</u>	
Sec	0	15	30	45	Comments
Mn	0	15	30	45	
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2	0	0	0	0	
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26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

Observer's Name (Print) MARY K. LOECHL
 Observer's Signature Mary K. Lochl Date 2/6/99
 Organization ST. JOHNS RIVER POWER PARK
 Confirmed by EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method (Circle One)
 Method 9 203A 203B Other: _____

Company Name
 ST. JOHNS RIVER POWER PARK
 Facility Name
 ST. JOHNS RIVER POWER PARK
 Street Address
 11201 NEW BERLIN ROAD
 City State Zip
 JACKSONVILLE FL. 32226

Process Unit # Operating Mode
 SHIP UNLOADING LIMESTONE
 Control Equipment Operating Mode

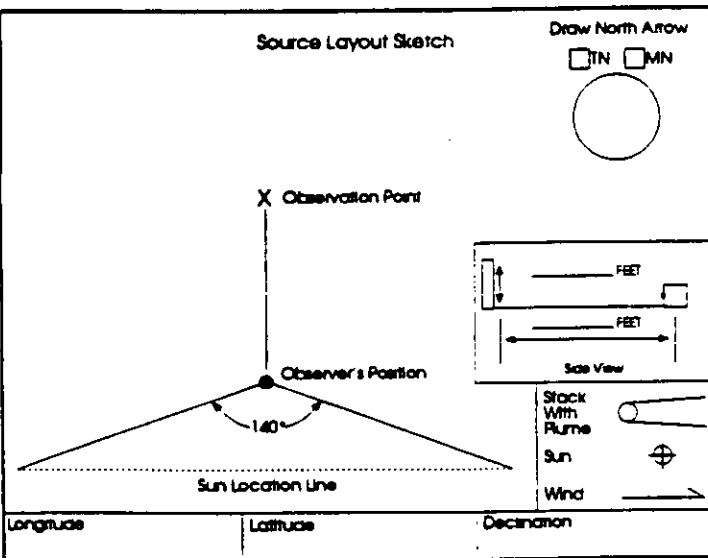
Describe Emission Point
 TRANSFER POINT HOPPER TO CONVEYOR CT-1

Height of Emis. Pt. Height of Emis. Pt. Rel. to Observer
 Start End Start End
 Distance to Emis. Pt. Direction to Emis. Pt. (Degrees)
 Start End Start End

Vertical Angle to Obs. Pt. Direction to Obs. Pt. (Degrees)
 Start End Start End
 Distance and Direction to Observation Point from Emission Point
 Start End

Describe Emissions
 Start End
 Emission Color Water Droplet Plume
 Start End Attached Detached None

Describe Plume Background
 Start End
 Background Color Sky Conditions
 Start End Start End
 Wind Speed Wind Direction
 Start End Start End
 Ambient Temp. Wet Bulb Temp. RH Percent
 Start End



Additional Information

Form Number 006-2 Page 2 of 2
 Continued on VEO Form Number 006-1

Observation Date		Time Zone		Start Time	End Time	Comments
Sec	Min	0	15	30	45	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
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12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
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23	0	0	0	0		
24	0	0	0	0		
25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print)
 MARK V. LOEHELT
 Observer's Signature
 [Signature] Date 2/6/99
 Organization
 ST. JOHNS RIVER POWER PARK
 Conducted By
 EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 007-1 Page 1 of 2
 Continued on VEO Form Number 007-2

Method Used (Circle One)
 Method 9 203A 2038 Other: _____

Company Name
ST. JOHNS RIVER POWER PARK
 Facility Name
ST. JOHNS RIVER POWER PARK
 Street Address
11201 NEW BERLIN ROAD
 City JACKSONVILLE State FL Zip 32226

Process
SHIPUNLOADING LIMESTONE Unit # _____ Operating Mode
50% CAPACITY
 Control Equipment
SIDE SHIELDS Operating Mode
0% CAPACITY

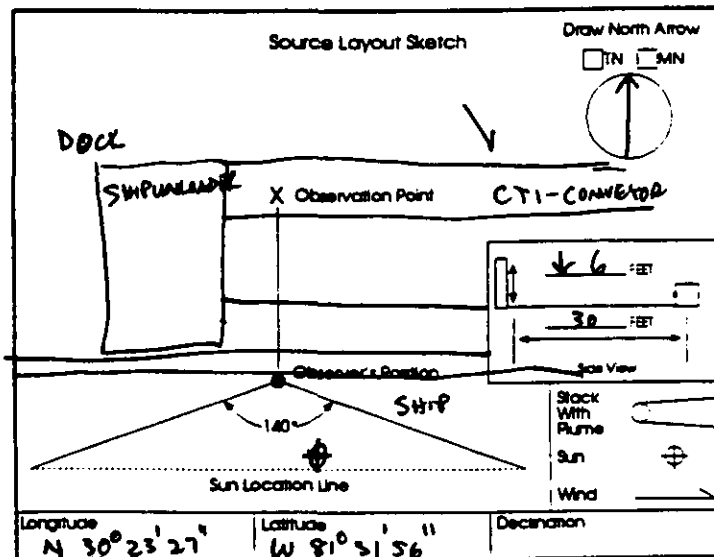
Describe Emission Point
CONVEYOR CT-1

Height of Emiss. Pt.
 Start 50' End 50' Height of Emiss. Pt. Rel. to Observer
 Start -6' End -6'
 Distance to Emiss. Pt.
 Start 30' End 30' Direction to Emiss. Pt. (Degrees)
 Start 0° End 0°

Vertical Angle to Obs. Pt.
 Start -15° End -15° Direction to Obs. Pt. (Degrees)
 Start 0° End 0°
 Distance and Direction to Observation Point from Emission Point
 Start 0-0 End 0-0

Describe Emissions
 Start NONE End NONE
 Emission Color
 Start NONE End NONE Attached Detached None

Describe Plume Background
 Start DOCK/WATER End DOCK/WATER
 Background Color
 Start WHITE/BLUE End WHITE/BLUE Sky Conditions
 Start SCATTERED End SCATTERED
 Wind Speed
 Start 0-3 End 0-3 Wind Direction
 Start MANW End MANW
 Ambient Temp.
 Start 70°F End 70°F Wet Bulb Temp. _____ RH Percent _____



Additional Information

Observation Date	Time Zone	Start Time	End Time						
<u>2/6/99</u>	<u>EST</u>	<u>10:00</u>	<u>11:00</u>	Sec					Comments
Min	0	15	30	45					
1	0	0	0	0					
2	0	0	0	0					
3	0	0	0	0					
4	0	0	0	0					
5	0	0	0	0					
6	0	0	0	0					
7	0	0	0	0					
8	0	0	0	0					
9	0	0	0	0					
10	0	0	0	0					
11	0	0	0	0					
12	0	0	0	0					
13	0	0	0	0					
14	0	0	0	0					
15	0	0	0	0					
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17	0	0	0	0					
18	0	0	0	0					
19	0	0	0	0					
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21	0	0	0	0					
22	0	0	0	0					
23	0	0	0	0					
24	0	0	0	0					
25	0	0	0	0					
26	0	0	0	0					
27	0	0	0	0					
28	0	0	0	0					
29	0	0	0	0					
30	0	0	0	0					

Observer's Name (Print)
MARK K. LOEBELT
 Observer's Signature
Mark K. Loebelt Date 2/6/99
 Organization
ST. JOHNS RIVER POWER PARK
 Certified by
EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name
ST. JOHNS RIVER POWER PARK

Facility Name
ST. JOHNS RIVER POWER PARK

Street Address
11201 NEW BERLIN ROAD

City State Zip
JACKSONVILLE FL 32226

Process Unit # Operating Mode
SHIP UNLOADING LIMESTONE

Control Equipment Operating Mode

Describe Emission Point
CONVEYER CT-1

Height of Emiss. Pt. Height of Emiss. Pt. Rel. to Observer
 Start End Start End

Distance to Emiss. Pt. Direction to Emiss. Pt. (Degrees)
 Start End Start End

Vertical Angle to Obs. Pt. Direction to Obs. Pt. (Degrees)
 Start End Start End

Distance and Direction to Observation Point from Emission Point
 Start End

Describe Emissions
 Start End

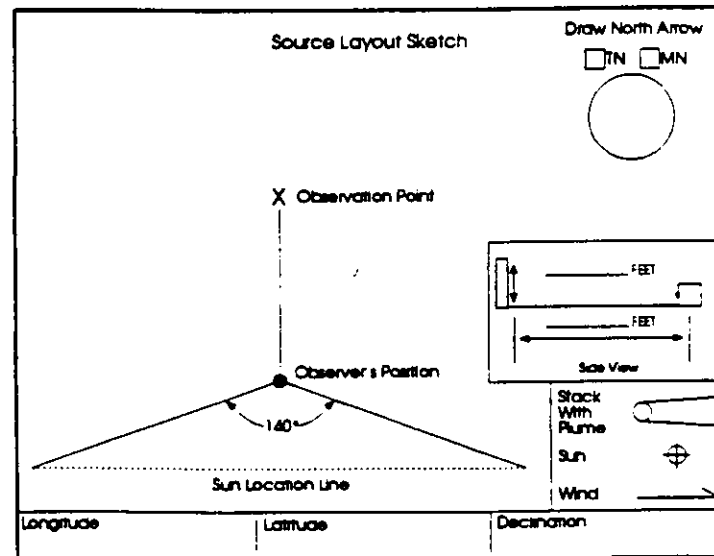
Emission Color Water Droplet Plume
 Start End Attached Detached None

Describe Plume Background
 Start End

Background Color Sky Conditions
 Start End Start End

Wind Speed Wind Direction
 Start End Start End

Ambient Temp. Wet Bulb Temp. RH Percent
 Start End Start End



Additional Information

Form Number Page
007-2 2 of 2

Continued on VEO Form Number **007-1**

Sec Min	Time Zone				Start Time	End Time	Comments
	0	15	30	45			
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
14	0	0	0	0			
15	0	0	0	0			
16	0	0	0	0			
17	0	0	0	0			
18	0	0	0	0			
19	0	0	0	0			
20	0	0	0	0			
21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print)
MARK V. LOECHELT

Observer's Signature Date
Mark V. Lochelet **2/6/99**

Organization
ST. JOHNS RIVER POWER PARK

Certified By Date
EASTERN TECHNICAL ASSOCIATES **12/3/98**

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method used (Circle One)
 Method 9 200A 2008 Other: _____

Company Name
 ST. JOHNS RIVER POWER PARK
 Facility Name
 ST. JOHNS RIVER POWER PARK
 Street Address
 11201 NEW BERLIN ROAD
 City State Zip
 JACKSONVILLE FL 32226

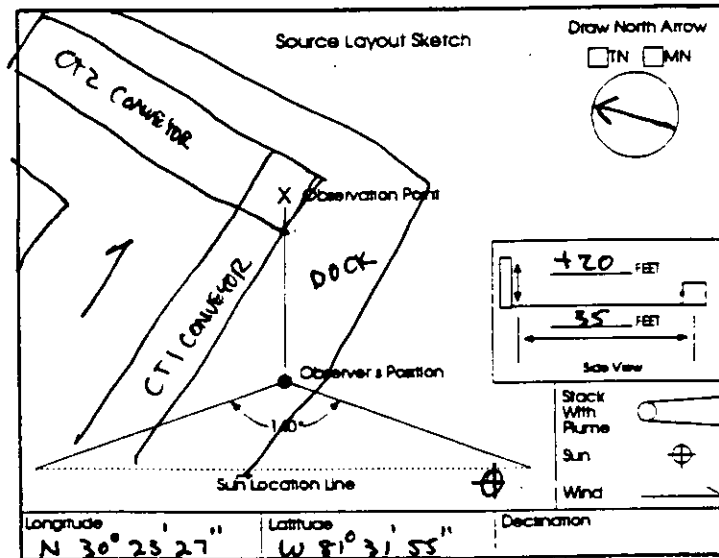
Process Unit # Operating Mode
 SHIP UNLOADING LIMESTONE 49% CAPACITY
 Control Equipment Operating Mode
 WET SUPPRESSION 0% CAPACITY

Describe Emission Point
 TRANSFER POINT CONVEYOR CT-1 TO
 CONVEYOR CT-2
 Height of Emiss. Pt. Start 25' End 25' Height of Emiss. Pt. Rel. to Observer Start 20' End 20'
 Distance to Emiss. Pt. Start 35' End 35' Direction to Emiss. Pt. (Degrees) Start 45° End 45°

Vertical Angle to Obs. Pt. Start 15° End 15° Direction to Obs. Pt. (Degrees) Start 045° End 045°
 Distance and Direction to Observation Point from Emission Point Start 0'-0° End 0'-0°

Describe Emissions
 Start NONE End NONE
 Emission Color Water Droplet Plume
 Start NONE End NONE Attached: Detached: None:

Describe Plume Background
 Start OPEN SKY End OPEN SKY
 Background Color Sky Conditions
 Start BLUE End BLUE Start SATTLED End SCATTERED
 Wind Speed Wind Direction
 Start 3-5 End 3-5 Start W End NW
 Ambient Temp. Wet Bulb Temp. RH Percent
 Start 72° F End 72° F



Form Number 008-1 Page 1 of 2
 Continued on VEO Form Number 008-2

Observation Date		Time Zone		Start Time	End Time	Comments
2/6/99		EST		1150	1250	
Sec	Min	0	15	30	45	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
15	0	0	0	0		
16	0	0	0	0		
17	0	0	0	0		
18	0	0	0	0		
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25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print) MARK V. LOEBELT
 Observer's Signature [Signature] Date 2/6/99
 Organization ST. JOHNS RIVER POWER PARK
 Certified By EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Method 9 (Circle One) 203A 203B Other: _____

Company Name
ST. JOHNS RIVER POWER PARK

Facility Name
ST. JOHNS RIVER POWER PARK

Street Address
11201 NEW BERLIN ROAD

City
JACKSONVILLE State
FL Zip
32226

Process
SHIPBOARDING LIMESTONE Unit # _____ Operating Mode _____

Control Equipment _____ Operating Mode _____

Describe Emission Point
TRANSFER POINT CONVEYOR CT-1 TO CONVEYOR CT-2

Height of Emiss. Pt. Start _____ End _____ Height of Emiss. Pt. Rel. to Observer Start _____ End _____

Distance to Emiss. Pt. Start _____ End _____ Direction to Emiss. Pt. (Degrees) Start _____ End _____

Vertical Angle to Obs. Pt. Start _____ End _____ Direction to Obs. Pt. (Degrees) Start _____ End _____

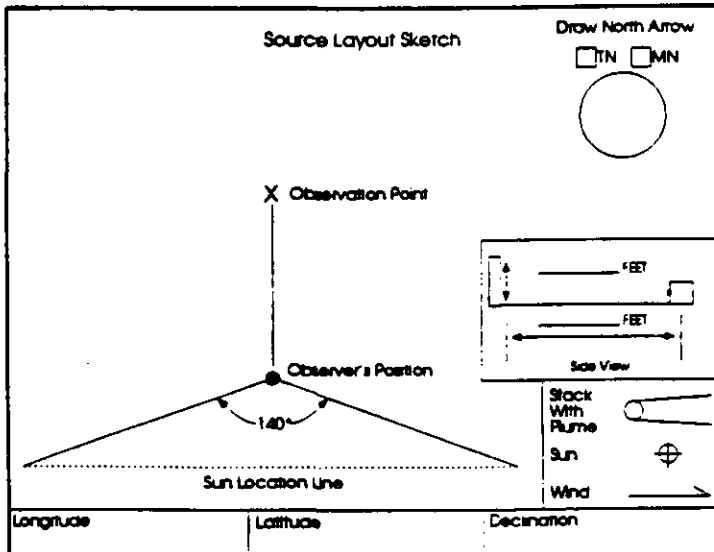
Distance and Direction to Observation Point from Emission Point Start _____ End _____

Describe Emissions Start _____ End _____ Emission Color _____ Water Droplet Plume Attached Detached None

Describe Plume Background Start _____ End _____ Background Color _____ Sky Conditions _____

Wind Speed Start _____ End _____ Wind Direction Start _____ End _____

Ambient Temp. Start _____ End _____ Wet Bulb Temp. _____ RH Percent _____



Additional Information

Form Number **008-2** Page **2** of **2**

Continued on VEO Form Number **008-1**

Sec Min	Observation Date				Time Zone	Start Time	End Time	Comments
	0	15	30	45	EST	1150	1250	
1	0	0	0	0				
2	0	0	0	0				
3	0	0	0	0				
4	0	0	0	0				
5	0	0	0	0				
6	0	0	0	0				
7	0	0	0	0				
8	0	0	0	0				
9	0	0	0	0				
10	0	0	0	0				
11	0	0	0	0				
12	0	0	0	0				
13	0	0	0	0				
14	0	0	0	0				
15	0	0	0	0				
16	0	0	0	0				
17	0	0	0	0				
18	0	0	0	0				
19	0	0	0	0				
20	0	0	0	0				
21	0	0	0	0				
22	0	0	0	0				
23	0	0	0	0				
24	0	0	0	0				
25	0	0	0	0				
26	0	0	0	0				
27	0	0	0	0				
28	0	0	0	0				
29	0	0	0	0				
30	0	0	0	0				

Observer's Name (Print)
MARK V. LOEWELT

Observer's Signature
Mark V. Loewelt Date **2/6/99**

Organization
ST. JOHNS RIVER POWER PARK

Certified By
EASTERN TECHNICAL ASSOCIATES Date **12/3/98**

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method (Circle One) Method 9 203A 203B Other: _____

Company Name
ST. JOHNS RIVER POWER PARK

Facility Name
ST. JOHNS RIVER POWER PARK

Street Address
11201 NEW BELLIN ROAD

City **JACKSONVILLE** State **FL** Zip **32226**

Process **SHIP UNLOADING Limestone** Unit # _____ Operating Mode **4490 CAPACITY**

Control Equipment **WRT SUPPRESSION** Operating Mode **070 CAPACITY**

Describe Emission Point
TRANSFER POINT CONVEYOR CT-2 TO CONVEYOR CT-3

Height of Emiss. Pt. Start **30'** End **30'** Height of Emiss. Pt. Rel. to Observer Start **25'** End **25'**

Distance to Emiss. Pt. Start **60'** End **60'** Direction to Emiss. Pt. (Degrees) Start **345°** End **345°**

Vertical Angle to Obs. Pt. Start **15°** End **15°** Direction to Obs. Pt. (Degrees) Start **360°** End **360°**

Distance and Direction to Observation Point from Emission Point Start **5'-90°** End **5'-90°**

Describe Emissions Start **NONE** End **NONE** Emission Color _____ Water Droplet Plume _____

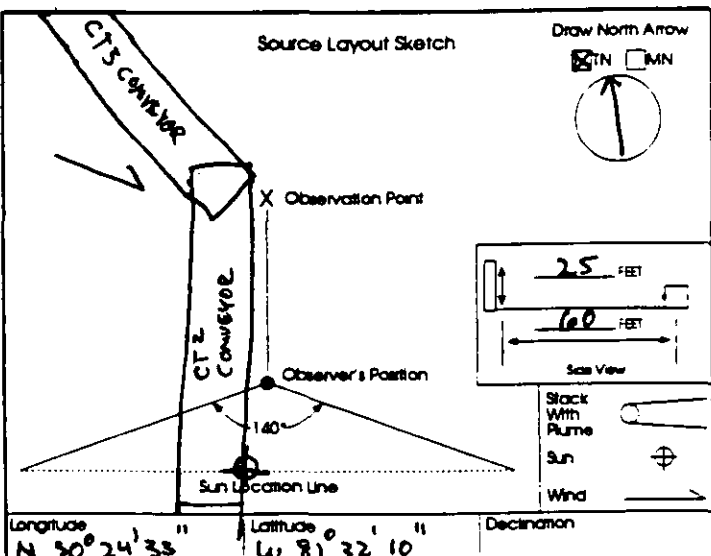
Start **NONE** End **NONE** Attached Detached None

Describe Plume Background Start **OPEN SKY** End **OPEN SKY** Sky Conditions _____

Background Color Start **BLUE** End **BLUE** Start **CLEAR** End **CLEAR**

Wind Speed Start **3-5** End **3-5** Wind Direction Start **NW** End **NW**

Ambient Temp. Start **73°F** End **74°F** Wet Bulb Temp. _____ RH Percent _____



Additional Information

Form Number **010-1** Page **1** of **2**

Continued on VEO Form Number **010-2**

Observation Date		Time Zone		Start Time	End Time	Comments
Min	Sec	0	15	30	45	
2/6/99		EST		1310	1410	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
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11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
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15	0	0	0	0		
16	0	0	0	0		
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25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print) **MARK K. LOECHELT**

Observer's Signature *Mark K. Loechelt* Date **2/6/99**

Organization **ST. JOHNS RIVER POWER PARK**

Conducted By **EASTERN TECHNICAL ASSOCIATES** Date **12/13/98**

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name
 ST. JOHNS RIVER POWER PARK
 Facility Name
 ST. JOHNS RIVER POWER PARK
 Street Address
 11201 NEW BELLIN ROAD
 City State Zip
 JACKSONVILLE FL 32226

Process Unit # Operating Mode
 SHIP UNLOADING LIMESTONE
 Control Equipment Operating Mode

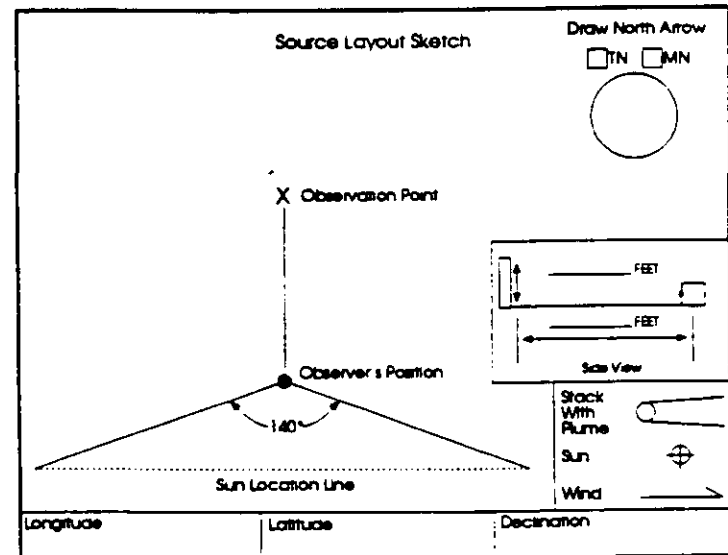
Describe Emission Point
 TRANSFER POINT CONVEYOR CT-2 TO CONVEYOR CT-3

Height of Emiss. Pt. Height of Emiss. Pt. Rel. to Observer
 Start End Start End
 Distance to Emiss. Pt. Direction to Emiss. Pt. (Degrees)
 Start End Start End

Vertical Angle to Obs. Pt. Direction to Obs. Pt. (Degrees)
 Start End Start End
 Distance and Direction to Observation Point from Emission Point
 Start End

Describe Emissions
 Start End
 Emission Color Water Droplet Plume
 Start End Attached Detached None

Describe Plume Background
 Start End
 Background Color Sky Conditions
 Start End Start End
 Wind Speed Wind Direction
 Start End Start End
 Ambient Temp. Wet Bulb Temp. RH Percent
 Start End



Additional Information

Form Number 010-2 Page 2 of 2
 Continued on VEO Form Number 010-1

Sec Min	Time Zone				Start Time	End Time	Comments
	0	15	30	45			
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
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17	0	0	0	0			
18	0	0	0	0			
19	0	0	0	0			
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21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print)
 MARK K. LOEUBELT
 Observer's Signature
 Mark K. Loebelt Date 2/6/99
 Organization
 ST. JOHNS RIVER POWER PARK
 Certified By
 EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method used (Circle One) Method 9 203A 203B Other: _____

Company Name
ST. JOHNS RIVER POWER PARK

Facility Name
ST. JOHNS RIVER POWER PARK

Street Address
11701 NEW BELLIN ROAD

City JACKSONVILLE State FL Zip 32226

Process SHIP UNLOADING LIMESTONE Unit # _____ Operating Mode 46% CAPACITY

Control Equipment WBT SUPPRESSION Operating Mode 0% CAPACITY

Describe Emission Point
TRANSFER POINT CONVEYOR CT-3 TO CONVEYOR CT-4

Height of Emiss. Pt. Start 75' End 75' Height of Emiss. Pt. Rel. to Observer Start 7' End 7'

Distance to Emiss. Pt. Start 150' End 150' Direction to Emiss. Pt. (Degrees) Start 288° End 288°

Vertical Angle to Obs. Pt. Start 20° End 20° Direction to Obs. Pt. (Degrees) Start 300° End 300°

Distance and Direction to Observation Point from Emission Point Start 20' - 54° End 20' - 54°

Describe Emissions Start NONE End ALONE

Emission Color _____ Water Droplet Plume _____

Start NONE End NONE Attached Detached None

Describe Plume Background Start OPEN SKY End OPEN SKY

Background Color _____ Sky Conditions _____

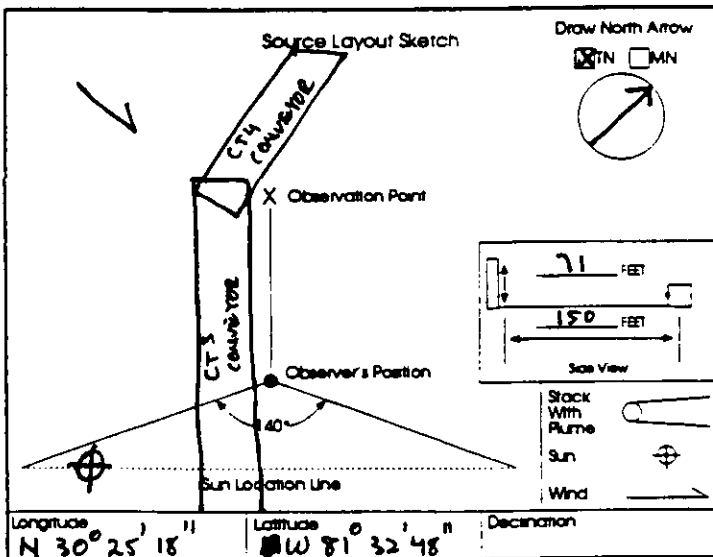
Start BLUE End BLUE Start CLEAR End CLEAR

Wind Speed _____ Wind Direction _____

Start 3-5 End 3-5 Start W End W

Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____

Start 75°F End 75°F



Additional Information

Form Number 012-1 Page 1 of 2

Continued on VEO Form Number 012-2

Observation Date		Time Zone		Start Time	End Time	Comments
2/6/99		EST		1430	1530	
Min	Sec	0	15	30	45	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11	0	0	0	0		
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13	0	0	0	0		
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21	0	0	0	0		
22	0	0	0	0		
23	0	0	0	0		
24	0	0	0	0		
25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print) MARK K. LOBCAULT

Observer's Signature Mark K. Lobcault Date 2/6/99

Organization ST. JOHNS RIVER POWER PARK

Certified By EASTERN TECHNICAL ASSOCIATES Date 12/3/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name
ST. JOHNS RIVER POWER PARK

Facility Name
ST. JOHNS RIVER POWER PARK

Street Address
11201 NEW BERLIN ROAD

City State Zip
JACKSONVILLE FL 32226

Process
SPINUNLOADING LIMESTONE

Unit # Operating Mode

Control Equipment Operating Mode

Describe Emission Point
TRANSFER POINT CONVEYOR CT-3 TO CONVEYOR CT-4

Height of Emiss. Pt.
 Start End Height of Emiss. Pt. Rel. to Observer
 Start End

Distance to Emiss. Pt.
 Start End Direction to Emiss. Pt. (Degrees)
 Start End

Vertical Angle to Obs. Pt.
 Start End Direction to Obs. Pt. (Degrees)
 Start End

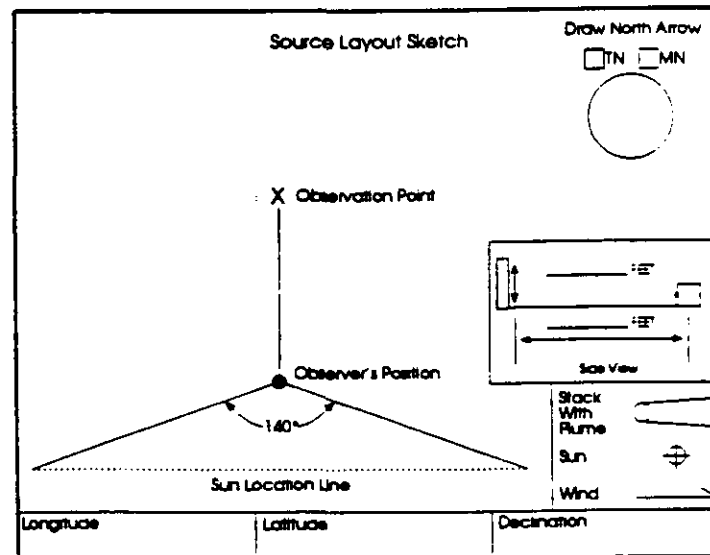
Distance and Direction to Observation Point from Emission Point
 Start End

Describe Emissions
 Start End Emission Color
 Start End Water Droplet Plume
 Attached Detached None

Describe Plume Background
 Start End Background Color
 Start End Sky Conditions
 Start End

Wind Speed Wind Direction
 Start End Start End

Ambient Temp. Wet Bulb Temp. RH Percent
 Start End Start End



Additional Information

Form Number Page
012-2 2 of 2

Continued on VEO Form Number **012-1**

Observation Date		Time Zone				Start Time	End Time
2/6/99		EST				1430	1530
Sec	Min	0	15	30	45	Comments	
1	0	0	0	0	0		
2	0	0	0	0	0		
3	0	0	0	0	0		
4	0	0	0	0	0		
5	0	0	0	0	0		
6	0	0	0	0	0		
7	0	0	0	0	0		
8	0	0	0	0	0		
9	0	0	0	0	0		
10	0	0	0	0	0		
11	0	0	0	0	0		
12	0	0	0	0	0		
13	0	0	0	0	0		
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26	0	0	0	0	0		
27	0	0	0	0	0		
28	0	0	0	0	0		
29	0	0	0	0	0		
30	0	0	0	0	0		

Observer's Name (Print)
MARK K. LOECHLT

Observer's Signature Date
Mark K. Loechlt 2/6/99

Organization
ST. JOHNS RIVER POWER PARK

Certified By Date
EASTERN TECHNICAL ASSOCIATES 12/3/99

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 013-1 Page 1 of 2
 Continued on VEO Form Number 013-2

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name St. Johns River Power Park.
 Facility Name St. Johns River Power Park.
 Street Address 11201 New Berlin Rd.
 City Jacksonville State FL Zip 32226.

Process Ship unloading limestone Unit # _____ Operating Mode 58% capacity
 Control Equipment Conditioned Material Operating Mode 0% capacity

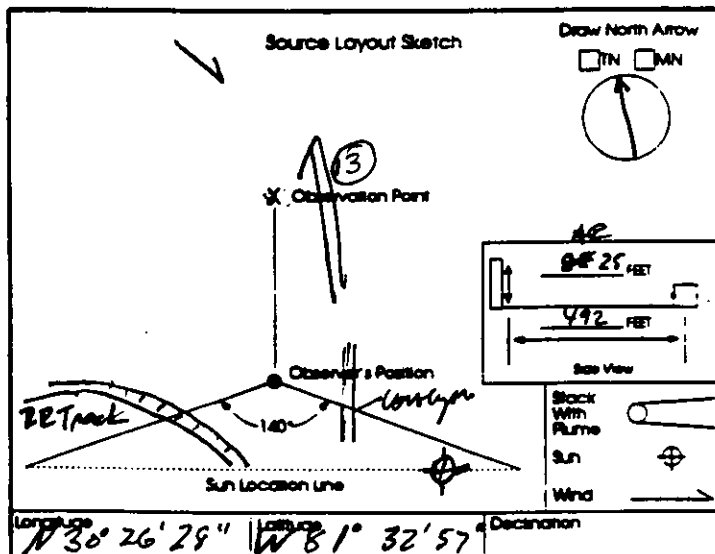
Describe Emission Point Conveyor CT-4

Height of Emis. Pt. Start 25' End 25' Height of Emis. Pt. Rel. to Observer Start 30' End 30'
 Distance to Emis. Pt. Start 150M End 150M Direction to Emis. Pt. (Degrees) Start 14°NE End 14°NE

Vertical Angle to Obs. Pt. Start 4° End 4° Direction to Obs. Pt. (Degrees) Start 14°NE End 14°NE
 Distance and Direction to Observation Point from Emission Point Start 5' SW End 3' SW AE

Describe Emissions Start none End none
 Emission Color Start none End none Water Droplet Plume Attached Detached None

Describe Plume Background Start N/A End _____
 Background Color Start BLUE End BLUE Sky Conditions Start BLUE/clear End BLUE/clear
 Wind Speed Start 0-5 End 0-5 Wind Direction Start NW End NW
 Ambient Temp Start 78°F End 80°F Wet Bulb Temp 65°F RH Percent 46%



Additional Information

Sec Min	Time Zone				Start Time	End Time	Comments
	0	15	30	45			
1	0	0	0	0	0935	1035	
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
14	0	0	0	0			
15	0	0	0	0			
16	0	0	0	0			
17	0	0	0	0			
18	0	0	0	0			
19	0	0	0	0			
20	0	0	0	0			
21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) Miguel Castro
 Observer's Signature Miguel Castro Date 2/6/99
 Organization St. Johns River Power Park.
 Certified by Eastern Technical Associates Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 013-2 Page 2 of 2
 Continued on VEO Form Number 013-1

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name St. Johns River Power Park.
 Facility Name St. Johns River Power Park.
 Street Address 11201 New Berlin Rd.
 City Jacksonville State FL Zip 32226

Process Ship Unloading Limestone Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

Describe Emission Point CONVEYOR CT-4

Height of Emiss. Pt. _____ Height of Emiss. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emiss. Pt. _____ Direction to Emiss. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emissions
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____

Source Layout Sketch
 Draw North Arrow TN MN

 Longitude _____ Latitude _____ Declination _____

Additional Information _____

Sec Min	Time Zone				Start Time	End Time	Comments
	0	15	30	45			
1	0	0	0	0	0935	1035	
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
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21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
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25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) ALVARO CASTRO
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. Johns River Power Park.
 Created by Eastern Technical Assoc Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 016-1 Page 1 of 2
 Continued on VEO Form Number 016-2

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name Ft. Johns River Power Plant
 Facility Name Ft. Johns River Power Plant
 Street Address 11201 New Berlin Rd.
 City Jacksonville State FL Zip 32246

Process Ship Unloading limestone Unit # _____ Operating Mode 58% capacity
 Control Equipment Conditioned Material Operating Mode 0% capacity

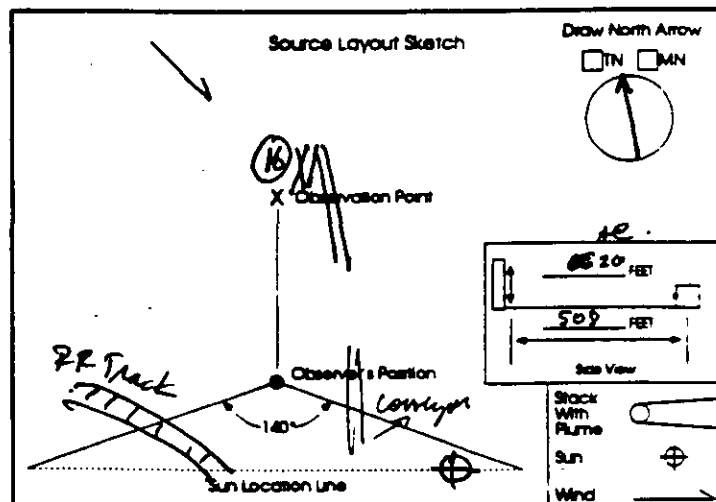
Describe Emission Point
Transfer Point CT-4 Trailing Conveyor S1

Height of Emiss. Pt. Start 20' End 20' Height of Emiss. Pt. Rel. to Observer Start 25' End 25'
 Distance to Emiss. Pt. Start 155m End 155m Direction to Emiss. Pt. (Degrees) Start 12° NE End 12° NE

Vertical Angle to Obs. Pt. Start 4° End 4° Direction to Obs. Pt. (Degrees) Start 12° NE End 12° NE
 Distance and Direction to Observation Point from Emission Point Start 4' SW End 4' SW

Describe Emissions
 Start none End none
 Emission Color Start none End none Water Droplet Plume Attached Detached None

Describe Plume background
 Start N/A End _____
 Background Color Start Blue End Blue Sky Conditions Start Blue/clear End Blue/clear
 Wind Speed Start 0-5 End 0-5 Wind Direction Start NW End NW NE
 Ambient Temp Start 78°F End 80°F Wet Bulb Temp 65°F RH Percent 46%



Longitude N 30° 26' 28" Latitude W 81° 32' 57" Declination _____

Additional Information

Observation Date	Time Zone	Start Time	End Time	Comments					
<u>2/6/99</u>		<u>0935</u>	<u>1035</u>	Sec	0	15	30	45	
Min									
1	0	0	0	0					
2	0	0	0	0					
3	0	0	0	0					
4	0	0	0	0					
5	0	0	0	0					
6	0	0	0	0					
7	0	0	0	0					
8	0	0	0	0					
9	0	0	0	0					
10	0	0	0	0					
11	0	0	0	0					
12	0	0	0	0					
13	0	0	0	0					
14	0	0	0	0					
15	0	0	0	0					
16	0	0	0	0					
17	0	0	0	0					
18	0	0	0	0					
19	0	0	0	0					
20	0	0	0	0					
21	0	0	0	0					
22	0	0	0	0					
23	0	0	0	0					
24	0	0	0	0					
25	0	0	0	0					
26	0	0	0	0					
27	0	0	0	0					
28	0	0	0	0					
29	0	0	0	0					
30	0	0	0	0					

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization Ft. Johns River Power Plant
 Certified by Eastern Technical Associates Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name *H. John Pura Power Plant*
 Facility Name *H. John Pura Power Plant*
 Street Address *11201 New Berlin Rd.*
 City *Jacksonville* State *FL* Zip *32226*

Process *Ship Unloading Limestone* Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

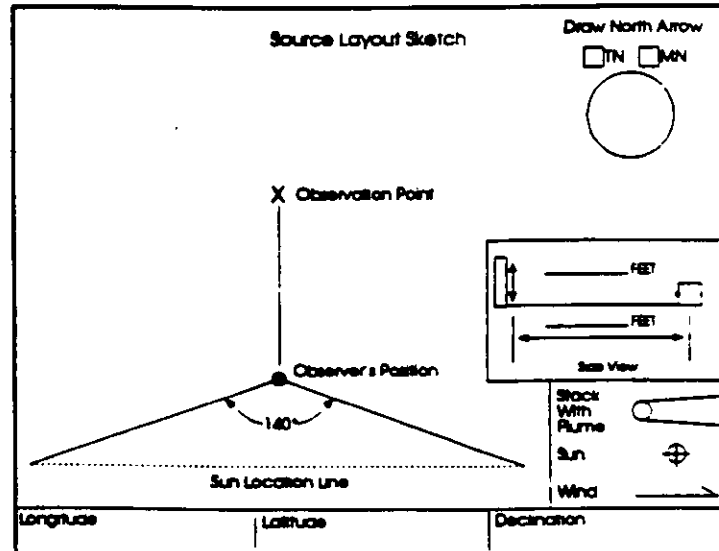
Describe Emission Point
Transfer Point CT-4 Trailing Conveyor SI

Height of Emiss. Pt. _____ Height of Emiss. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emiss. Pt. _____ Direction to Emiss. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emissions
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____



Additional Information

Form Number *016-2* Page *2* of *2*
 Continued on VEO Form Number *016-1*

Observation Date	Time Zone	Start Time	End Time					
<i>2/6/99</i>		<i>0935</i>	<i>1035</i>					
Min	Sec	0	15	30	45	Comments		
1	0	0	0	0	0			
2	0	0	0	0	0			
3	0	0	0	0	0			
4	0	0	0	0	0			
5	0	0	0	0	0			
6	0	0	0	0	0			
7	0	0	0	0	0			
8	0	0	0	0	0			
9	0	0	0	0	0			
10	0	0	0	0	0			
11	0	0	0	0	0			
12	0	0	0	0	0			
13	0	0	0	0	0			
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17	0	0	0	0	0			
18	0	0	0	0	0			
19	0	0	0	0	0			
20	0	0	0	0	0			
21	0	0	0	0	0			
22	0	0	0	0	0			
23	0	0	0	0	0			
24	0	0	0	0	0			
25	0	0	0	0	0			
26	0	0	0	0	0			
27	0	0	0	0	0			
28	0	0	0	0	0			
29	0	0	0	0	0			
30	0	0	0	0	0			

Observer's Name (Print) *Alvaro Castro*
 Observer's Signature *Alvaro Castro* Date *2/6/99*
 Organization *H. John Pura Power Plant*
 Certified by *Eastern Technical Associates* Date *12/2/98*

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name St. Johns River Power Plant
 Facility Name St. Johns River Power Plant
 Street Address 11201 New Berlin Rd.
 City Dunwoody State FL Zip 32226

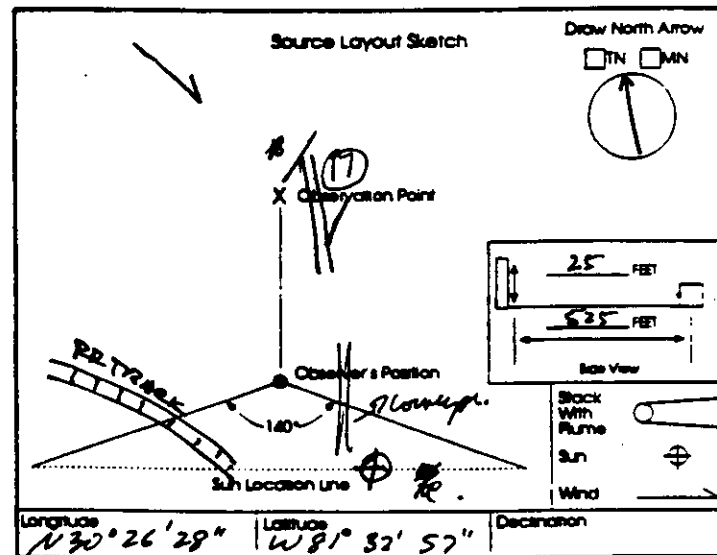
Process Ship Unloading Limestone Unit # _____ Operating Mode 49% Capacity
 Comb. Equipment Conditioned Material Operating Mode 0% Capacity

Describe Emission Point
TRAILING Conveyor S1
 Height of Emis. Pt. Start 25' End 25' Height of Emis. Pt. Rel. to Observer Start 30' End 30' NE
 Distance to Emis. Pt. Start 160m End 160m Direction to Emis. Pt. (Degrees) Start 8° NE End 8° NE

Vertical Angle to Obs. Pt. Start 4° End 4° Direction to Obs. Pt. (Degrees) Start 8° NE End 8° NE
 Distance and Direction to Observation Point from Emission Point Start 5' SW End 5' SW NE

Describe Emissions
 Start none End none Water Droplet Plume
 Emission Color Start none End none Attached Detached None

Describe Plume Background
 Start _____ End _____ Sky Conditions Start Clear End Clear
 Background Color Start Blue End Blue Wind Direction Start NW End NW
 Wind Speed Start 0-5 End 0-5 Ambient Temp. Start 81° F End 84° F Wet bulb temp. 70° F RH Percent 60% NE



Additional Information

Form Number 017-1 Page 1 of 2
 Continued on VEO Form Number 017-2

Sec Min	Time Zone				Start Time	End Time	Comments
	0	15	30	45	<u>1155</u> <u>NE</u>	<u>1255</u> <u>NE</u>	
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
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25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. Johns River Power Plant
 Observed by Eastern Technical Associates Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 017-2 Page 2 of 2
 Continued on VEO Form Number 017-1

Method Steps (Circle One)
 Method 9 200A 200B Other _____

Company Name St. Johns River Power Park
 Facility Name St. Johns River Power Park
 Street Address 11201 New Berlin Rd.
 City Tacksville State FL Zip 32226

Process Shipping Valodiaz limestone Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

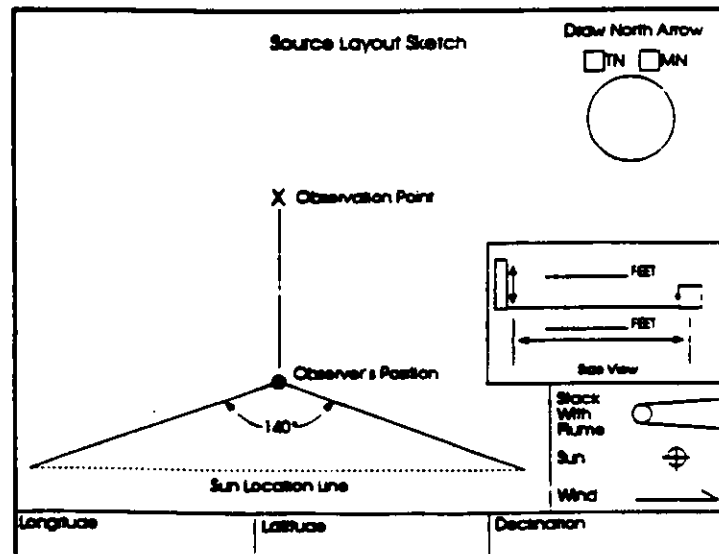
Describe Emission Point
TRAILING CONVEYOR S1

Height of Emiss. Pt. _____ Height of Emiss. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emiss. Pt. _____ Direction to Emiss. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emissions
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____



Additional Information

Observation Date	Time Zone	Start Time	End Time				
2/6/99		1155	1255				
Sec	0	15	30	45	Comments		
Min							
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
14	0	0	0	0			
15	0	0	0	0			
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17	0	0	0	0			
18	0	0	0	0			
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23	0	0	0	0			
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25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) ALVARO CASTRO
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. Johns River Power Park
 Certified by Eastern Technical Associates Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 018-1 Page 1 of 2
 Continued on VEO Form Number 018-2

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name St. John River Power Park.
 Facility Name St. Johns River Power Park.
 Street Address 11201 New Berlin Rd.
 City Tacomaville State FL Zip 32226

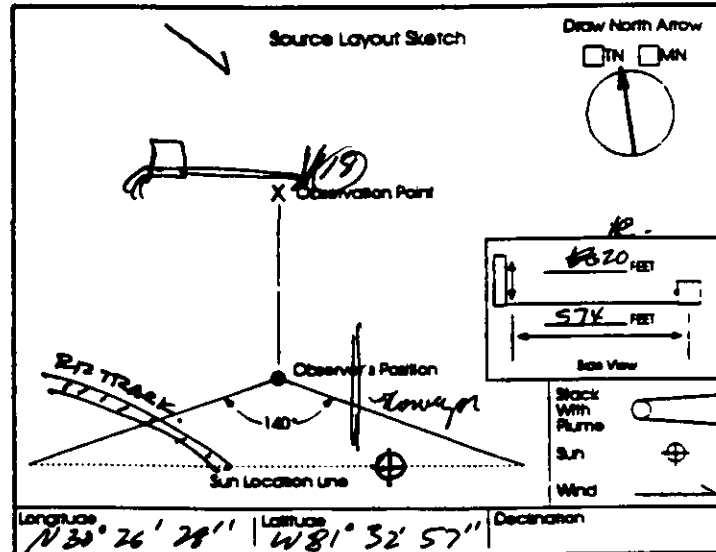
Process Ship Unloading limestone Unit # _____ Operating Mode 49% Capacity
 Control Equipment Conditioned Material Operating Mode 0% Capacity

Describe Emission Point
TRANSFER POINT - TRAILING CONVEYOR S1 TO Boom Conveyor S2
 Height of Emiss. Pt. Start 20' End 20' Height of Emiss. Pt. Rel. to Observer Start 25' End 25'
 Distance to Emiss. Pt. Start 175m End 175m Direction to Emiss. Pt. (Degrees) Start 8° NE End 8° NE

Vertical Angle to Obs. Pt. Start 3° End 3° Direction to Obs. Pt. (Degrees) Start 8° NE End 8° NE
 Distance and Direction to Observation Point from Emission Point Start 10' SW End 10' SW NE

Describe Emissions
 Start None End None
 Emission Color Start None End None Water Droplet Plume Attached Detached None

Describe Plume Background
 Start Background Color Blue End Blue Sky Conditions Start Clear End Clear
 Wind Speed Start 0-5 End 0-5 Wind Direction Start NW End NW
 Ambient Temp Start 81° F End 81° F Wet Bulb Temp 70° F RH Percent 60%



Additional Information

Observation Date	Time Zone	Start Time	End Time				
<u>2/6/99</u>		<u>1155</u>	<u>1255</u>				
Sec	0	15	30	45	Comments		
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
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12	0	0	0	0			
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25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. John River Power Park.
 Checked By Engineer Technical Services Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 018-2 Page 2 of 2
 Continued on VEO Form Number 018-1

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name H. John River Power Park.
 Facility Name H. John River Power Park.
 Street Address 11201 New Berlin Rd.
 City Jacksonville State FL Zip 32226

Process Ship Unloading limestone Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

Describe Emission Point
TRANSFER POINT: TRAILING CONVEYOR S1
TO BOOM CONVEYOR S2
 Height of Emiss. Pt. _____ (Height of Emiss. Pt. Rel. to Observer)
 Start _____ End _____ Start _____ End _____
 Distance to Emiss. Pt. _____ Direction to Emiss. Pt. (Degrees)
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees)
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point
 Start _____ End _____

Describe Emissions
 Start _____ End _____
 Emission Color _____ Water Droplet Plume
 Start _____ End _____ Attached Detached None

Describe Plume Background
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____

Source Layout Sketch
 Draw North Arrow TN MN

 Longitude _____ Latitude _____ Direction _____

Additional Information

Observation Date	Time Zone	Start Time	End Time						
<u>2/6/99</u>		<u>1155</u>	<u>1255</u>						
Sec	0	15	30	45	Comments				
1	0	0	0	0					
2	0	0	0	0					
3	0	0	0	0					
4	0	0	0	0					
5	0	0	0	0					
6	0	0	0	0					
7	0	0	0	0					
8	0	0	0	0					
9	0	0	0	0					
10	0	0	0	0					
11	0	0	0	0					
12	0	0	0	0					
13	0	0	0	0					
14	0	0	0	0					
15	0	0	0	0					
16	0	0	0	0					
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26	0	0	0	0					
27	0	0	0	0					
28	0	0	0	0					
29	0	0	0	0					
30	0	0	0	0					

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization H. John River Power Park.
 Checked By Boston Technical Associates Date 12/2/98

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name *St. Johns River Power Park*
 Facility Name *St. Johns River Power Park*
 Street Address *11201 New Berlin Rd.*
 City *Jacksonville* State *FL* Zip *32226*

Process *Ship Unloading limestone* Unit # _____ Operating Mode *49% Capacity*
 Control Equipment *Conditioned Material* Operating Mode *0% Capacity*

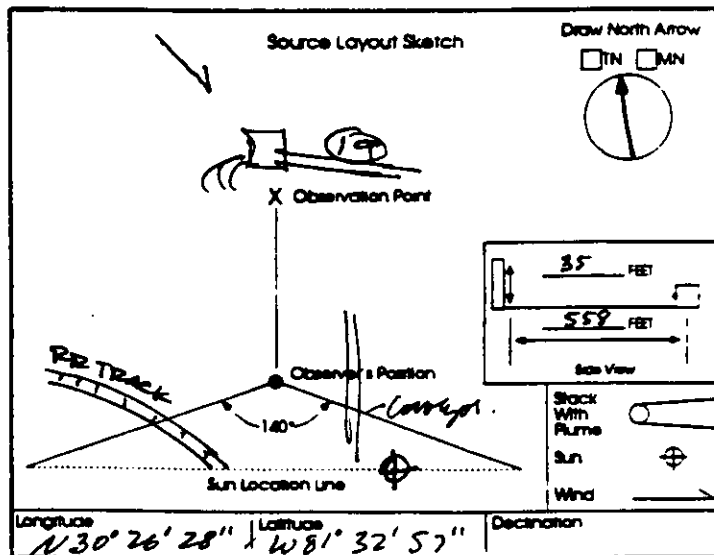
Describe Emission Point
Boom Conveyor S2

Height of Emis. Pt. Start *35'* End *35'* Height of Emis. Pt. Rel. to Observer Start *40'* End *40'*
 Distance to Emis. Pt. Start *170m* End *170m* Direction to Emis. Pt. (Degrees) Start *5° NE* End *5° NE*

Vertical Angle to Obs. Pt. Start *4°* End *4°* Direction to Obs. Pt. (Degrees) Start *5° NE* End *5° NE*
 Distance and Direction to Observation Point from Emission Point Start *10' SW* End *10' SW*

Describe Emissions
 Start *none* End *none*
 Emission Color Start *none* End *none* Water Droplet Plume Attached Detached None

Describe Plume Background
 Start Background Color *Blue* End *Blue* Sky Conditions Start *Clear* End *Clear*
 Wind Speed Start *0-5* End *0-5* Wind Direction Start *NW* End *NW*
 Ambient Temp. Start *81°* End *81°* Wet Bulb Temp. *70°* RH Percent *60%*



Additional Information

Form Number *019-1* Page *1 of 2*
 Continued on VEO Form Number *019-2*

Sec Min	Time Zone				Start Time	End Time	Comments
	0	15	30	45	<i>11:55</i>	<i>12:55</i>	
1	0	0	0	0	<i>NE</i>	<i>NE</i>	
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
14	0	0	0	0			
15	0	0	0	0			
16	0	0	0	0			
17	0	0	0	0			
18	0	0	0	0			
19	0	0	0	0			
20	0	0	0	0			
21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) *Alvaro Castro*
 Observer's Signature *Alvaro Castro* Date *2/6/99*
 Organization *St. Johns River Power Park*
 Checked by *Robert Technical Associate* Date *12/2/98*

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 019-2 Page 2 of 2
 Continued on VSO Form Number 019-1

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name St. Johns River Power Park
 Facility Name St. Johns River Power Park
 Street Address 11201 New Berlin Rd.
 City Jacksonville State FL Zip 32226

Process Ship Unloading limestone Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

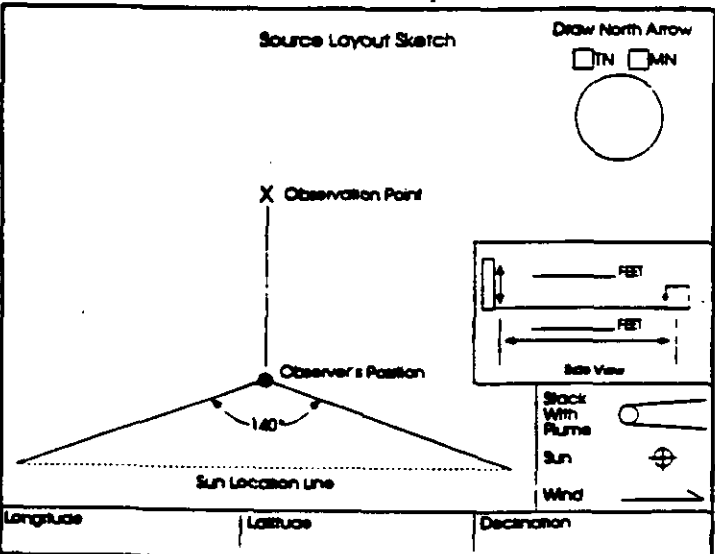
Describe Emission Point
Boom Conveyor S2

Height of Emiss. Pt. _____ Height of Emiss. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emiss. Pt. _____ Direction to Emiss. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emission
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____



Observation Date		Time Zone				Start Time	End Time
2/6/99						1155	1255
Min	Sec	0	15	30	45	Comments	
1	0	0	0	0	0		
2	0	0	0	0	0		
3	0	0	0	0	0		
4	0	0	0	0	0		
5	0	0	0	0	0		
6	0	0	0	0	0		
7	0	0	0	0	0		
8	0	0	0	0	0		
9	0	0	0	0	0		
10	0	0	0	0	0		
11	0	0	0	0	0		
12	0	0	0	0	0		
13	0	0	0	0	0		
14	0	0	0	0	0		
15	0	0	0	0	0		
16	0	0	0	0	0		
17	0	0	0	0	0		
18	0	0	0	0	0		
19	0	0	0	0	0		
20	0	0	0	0	0		
21	0	0	0	0	0		
22	0	0	0	0	0		
23	0	0	0	0	0		
24	0	0	0	0	0		
25	0	0	0	0	0		
26	0	0	0	0	0		
27	0	0	0	0	0		
28	0	0	0	0	0		
29	0	0	0	0	0		
30	0	0	0	0	0		

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. Johns River Power Park
 Certified by Eastern Technical Association Date 12/2/98

Additional Information

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 202A 202B Other: _____

Company Name: *St. Johns River Power Park.*
 Facility Name: *St. Johns River Power Park.*
 Street Address: *11201 New Berlin Rd.*
 City: *Jacksonville* State: *FL* Zip: *32226*

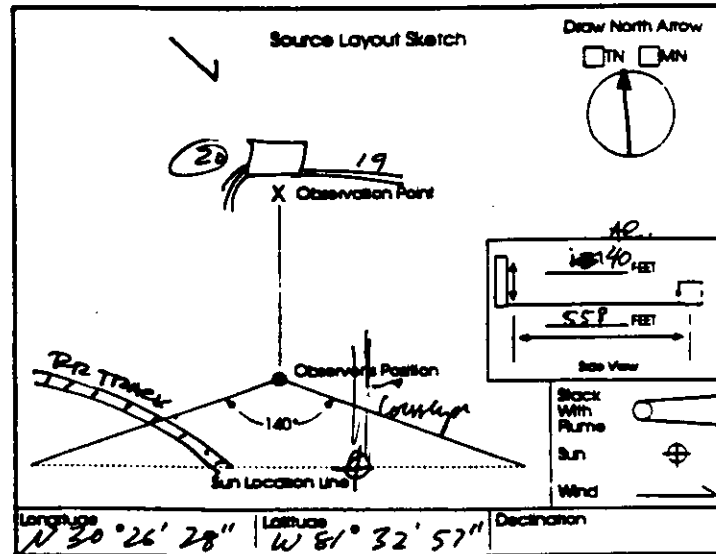
Process: *Ship Unloading limestone* Unit #: _____ Operating Mode: *77% Capacity*
 Control Equipment: *Conditioned Material sprayed* water Operating Mode: *0% Capacity*

Describe Emission Point:
TRANSFER POINT: Boom Conveyor S2 to Storage Piles B+C, CT-4
 Height of Emiss. Pt. Height of Emiss. Pt. Rel. to Observer
 Start *40'* End *40'* Start *45'* End *45'*
 Distance to Emiss. Pt. Direction to Emiss. Pt. (Degrees)
 Start *170m* End *170m* Start *3° NE* End *3° NE*

Vertical Angle to Obs. Pt. Direction to Obs. Pt. (Degrees)
 Start *5°* End *5°* Start *3° NE* End *3° NE*
 Distance and Direction to Observation Point from Emission Point
 Start *10'S* End *10'S* *AE*

Describe Emissions
 Start *none* End *none*
 Emission Color Water Droplet Plume
 Start *none* End *none* Attached Detached None

Describe Plume Background
 Start End
 Background Color Sky Conditions
 Start *Blue* End *Blue* Start *Clear* End *Clear*
 Wind Speed Wind Direction
 Start *0-5* End *0-5* Start *NW* End *NW*
 Ambient Temp. Wet Bulb Temp. RH Percent
 Start *81°F* End *84°F* *70°F* *60%*



Additional Information

Form Number *020-1* Page *1* of *2*
 Continued on VEO Form Number *020-2*

Observation Date		Time Zone				Start Time	End Time
2/6/99						11 55	1255
Sec	0	15	30	45	Comments		
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
14	0	0	0	0			
15	0	0	0	0			
16	0	0	0	0			
17	0	0	0	0			
18	0	0	0	0			
19	0	0	0	0			
20	0	0	0	0			
21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0			

Observer's Name (Print) *Alvaro Castro*
 Observer's Signature *Alvaro Castro* Date *2/6/99*
 Organization *St. Johns River Power Park.*
 Certified by *Eastern Technical Associates* Date *12/2/98*

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 2038 Other: _____

Company Name: *St. Johns River Power Plant*
 Facility Name: *St. Johns River Power Plant*
 Street Address: *11 201 New Berlin Rd.*
 City: *Jacksonville* State: *FL* Zip: *32226*

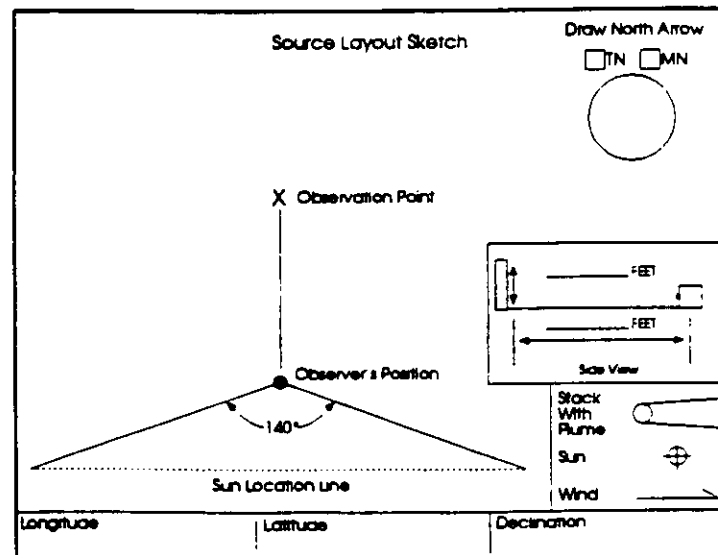
Process: *Ship Unloading Limestone* Unit #: _____ Operating Mode: _____
 Control Equipment: _____ Operating Mode: _____

Describe Emission Point:
TRANSFER POINT: Boom Conveyor S2 to Storage Piles B+C, CT 4
 Height of Emis. Pt. _____ Height of Emis. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emis. Pt. _____ Direction to Emis. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emissions
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____



Additional Information

Form Number *020-2* Page *2 of 2*
 Continued on VEO Form Number *020-1*

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

Observer's Name (Print) *Alvaro Castro*
 Observer's Signature *Alvaro Castro* Date *2/6/99*
 Organization *St. Johns River Power Plant*
 Certified by *Eastern Technical Associate* Date *12/2/98*

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method (Circle One) Method 9 203A 203B Other _____

Company Name *St. Johns River Power Plant*
 Facility Name *St. Johns River Power Plant*
 Street Address *11201 New Berlin Rd.*
 City *Jacksonville* State *FL* Zip *32226*

Process *LIMESTONE LOADOUT* Unit # _____ Operating Mode *12,100 TPD*
 Control Equipment *Water sprays* Operating Mode *0% capacity*

Describe Emission Point
LOADER BUCKET GRAB FROM PILE

Height of Emiss. Pt. Start *8'* End *8'* Height of Emiss. Pt. Rel. to Observer Start *13'* End *13'*
 Distance to Emiss. Pt. Start *160M* End *160M* Direction to Emiss. Pt. (Degrees) Start *356NW* End *356NW*

Vertical Angle to Obs. Pt. Start *4°* End *4°* Direction to Obs. Pt. (Degrees) Start *356NW* End *356NW*
 Distance and Direction to Observation Point from Emission Point Start *20' W* End *20' W* *NE*

Describe Emissions Start *none* End *none*
 Emission Color Start *none* End *none* Water Droplet Plume Attached Detached None

Describe Plume Background Start _____ End _____
 Background Color Start *Blue* End *Blue* Sky Conditions Start *Clear* End *Clear*
 Wind Speed Start *0-5* End *0-5* Wind Direction Start *SE* End *SE*
 Ambient Temp Start *81°F* End *81°F* Wet Bulb Temp *67°F* RH Percent *54%*

Source Layout Sketch

Draw North Arrow TN MN

Observer Position *Observer* *Compass*

Sun Location Line *Sun*

Stack With Plume *Stack*

Longitude *N 30° 26' 28"* Latitude *N 81° 32' 57"* Declination _____

Additional Information

Form Number *023J1* Page *1* of *2*
 Continued on VEO Form Number *023J2*

Observer's Date	Time Zone	Start Time	End Time	Comments		
<i>2/6/99</i>		<i>1045</i>	<i>1145</i>			
Sec	Min	0	15	30	45	Comments
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
15	0	0	0	0		
16	0	0	0	0		
17	0	0	0	0		
18	0	0	0	0		
19	0	0	0	0		
20	0	0	0	0		
21	0	0	0	0		
22	0	0	0	0		
23	0	0	0	0		
24	0	0	0	0		
25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		<i>28 Trade/Am @ 187 m/h/mch.</i>

Observer's Name (Print) *Alvan Castro*
 Observer's Signature *Alvan Castro* Date *2/6/99*
 Organization *St. Johns River Power Plant*
 Certified by *Baden Technical Associates* Date *12/2/98*

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name *St. Johns River Power Corp.*
 Facility Name *St. Johns River Power Plant*
 Street Address *11201 New Berlin Rd.*
 City *Jacksonville* State *FL* Zip *32226*

Process _____ Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

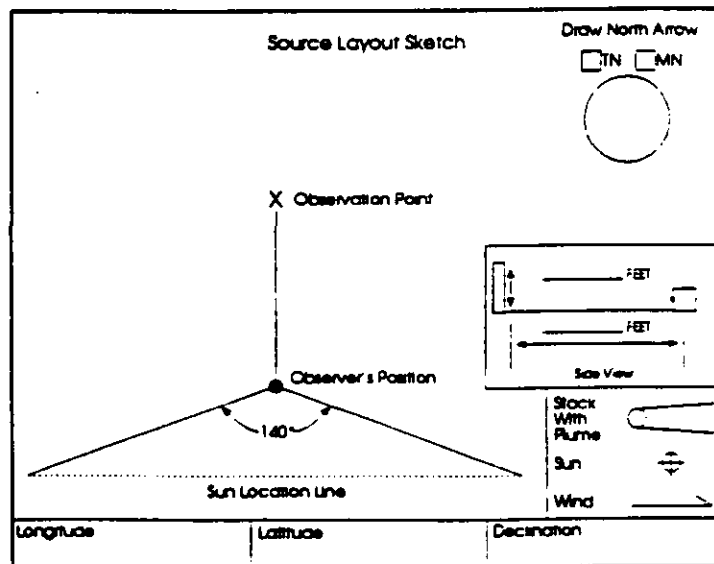
Describe Emission Point _____

Height of Emis. Pt. _____ Height of Emis. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emis. Pt. _____ Direction to Emis. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emissions _____
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background _____
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____ Start _____ End _____



Additional Information _____

Form Number *023J2* Page *2* of *2*
 Continued on VEO Form Number *023J1*

Observation Date		Time Zone				Start Time	End Time
2/6/99						1045	1145
Sec	0	15	30	45	Comments		
Min	0	0	0	0			
1	0	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	0	0			
7	0	0	0	0			
8	0	0	0	0			
9	0	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	0	0			
14	0	0	0	0			
15	0	0	0	0			
16	0	0	0	0			
17	0	0	0	0			
18	0	0	0	0			
19	0	0	0	0			
20	0	0	0	0			
21	0	0	0	0			
22	0	0	0	0			
23	0	0	0	0			
24	0	0	0	0			
25	0	0	0	0			
26	0	0	0	0			
27	0	0	0	0			
28	0	0	0	0			
29	0	0	0	0			
30	0	0	0	0	<i>28 Trucks/hr. @ 15mph</i>		

Observer's Name (Print) *Alvaro Castro*
 Observer's Signature *Alvaro Castro* Date *2/6/99*
 Organization *St. Johns River Power Corp.*
 Certified By *Eastern Technical Associates* Date *12/2/98*

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 200A 200B Other _____

Company Name St. Johns River Power Park
 Facility Name St. Johns River Power Park
 Street Address 11701 New Berlin Rd.
 City Jacksonville State FL Zip 32226

Process LIMESTONE LOADOUT Unit # _____ Operating Mode 12,100 TPD
 Control Equipment Water spray Operating Mode 0% Capacity

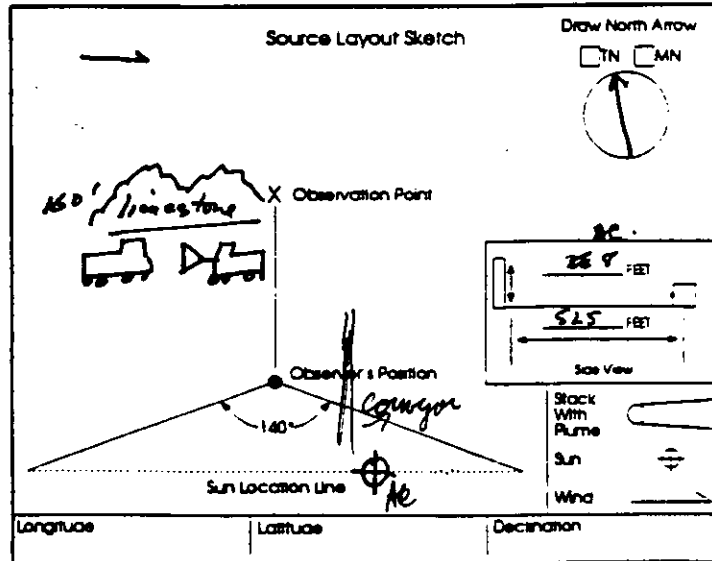
Describe Emission Point
LOADING BUCKET DUMP TO TRUCK

Height of Emiss. Pt. Start 8' End 8' Height of Emiss. Pt. Rel. to Observer Start 13' End 13'
 Distance to Emiss. Pt. Start 160 M End 160 M Direction to Emiss. Pt. (Degrees) Start 356 NW End 356 NW

Vertical Angle to Obs. Pt. Start 4° End 4° Direction to Obs. Pt. (Degrees) Start 356 NW End 356 NW
 Distance and Direction to Observation Point from Emission Point Start 20' W End 20' W NR

Describe Emissions
 Start none End none Emission Color _____ Water Droplet Plume _____
 Start none End none Attached Detached None

Describe Plume Background
 Start _____ End _____ Background Color Start Blue End Blue Sky Conditions Start Clear End Clear
 Wind Speed Start 0-5 End 0-5 Wind Direction Start SE End SE
 Ambient Temp Start 81°F End 81°F Wet Bulb Temp 67°F RH Percent 54%



Form Number 02353 Page 1 of 2
 Continued on VEO Form Number 02354

Observation Date		Time Zone		Start Time	End Time	Comments
Sec	Min	0	15	30	45	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
15	0	0	0	0		
16	0	0	0	0		
17	0	0	0	0		
18	0	0	0	0		
19	0	0	0	0		
20	0	0	0	0		
21	0	0	0	0		
22	0	0	0	0		
23	0	0	0	0		
24	0	0	0	0		
25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		<u>29 Trucks/hr @ 15 tons/truck</u>
30	0	0	0	0		

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. Johns River Power Park
 Confirmed By Beaton Technical Associates Date 12/2/98

Additional Information

EPA

VISIBLE EMISSION OBSERVATION FORM 1

Form Number 023J4 Page 2 of 2
 Continued on VEO Form Number 023J3

Method Used (Circle One)
 Method 9 203A 203B Other: _____

Company Name St. Johns River Power Park
 Facility Name St. Johns River Power Park
 Street Address 11201 New Berlin Rd.
 City Jacksonville State FL Zip 32224

Process _____ Unit # _____ Operating Mode _____
 Control Equipment _____ Operating Mode _____

Describe Emission Point _____

Height of Emis. Pt. _____ Height of Emis. Pt. Rel. to Observer _____
 Start _____ End _____ Start _____ End _____
 Distance to Emis. Pt. _____ Direction to Emis. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____

Vertical Angle to Obs. Pt. _____ Direction to Obs. Pt. (Degrees) _____
 Start _____ End _____ Start _____ End _____
 Distance and Direction to Observation Point from Emission Point _____
 Start _____ End _____

Describe Emissions _____
 Start _____ End _____
 Emission Color _____ Water Droplet Plume _____
 Start _____ End _____ Attached Detached None

Describe Plume Background _____
 Start _____ End _____
 Background Color _____ Sky Conditions _____
 Start _____ End _____ Start _____ End _____
 Wind Speed _____ Wind Direction _____
 Start _____ End _____ Start _____ End _____
 Ambient Temp. _____ Wet Bulb Temp. _____ RH Percent _____
 Start _____ End _____

Source Layout Sketch

Draw North Arrow TN MN

Observer's Position

Observation Point

Sun Location Line

140

Stack With Plume

Sun

Wind

Scale View

_____ FEET

_____ FEET

Longitue _____ Latitude _____ Declination _____

Observer/Date	Time Zone	Start Time	End Time	Comments	
<u>2/6/99</u>		<u>1045</u>	<u>1145</u>		
Sec	0	15	30	45	
Min	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	<u>28 Trucks/hr @ 1570/1hr</u>

Observer's Name (Print) Alvaro Castro
 Observer's Signature Alvaro Castro Date 2/6/99
 Organization St. Johns River Power Park
 Certified by Eastern Technical Assoc. Date 12/2/98

Additional Information _____