

Sheplak, Scott

From: Forney.Kathleen@epamail.epa.gov
Sent: Thursday, December 18, 2003 9:16 AM
To: Sheplak, Scott
Cc: Worley.Gregg@epamail.epa.gov; Danois.Gracy@epamail.epa.gov;
Forney.Kathleen@epamail.epa.gov; Huey.Joel@epamail.epa.gov
Subject: Comments on FL Utility Title V Renewal Permits

Scott,

Sorry I didn't get this to you yesterday, but better late than never, right? :-) I am also faxing EPA's congressional responses to you now.

FPL Manatee and Lakeland Electric:

1. Verify that the descriptions of the units listed in Appendix I-1 (insignificant activities) and Appendix U-1 (unregulated activities) include any applicable size thresholds (i.e., fuel oil tank sizes, emergency generator sizes, etc...) or content restrictions (i.e., halogenated vs. non-halogenated solvents.)
2. Verify that the permit condition titled DEP Method 9 has been included for the units which have visible emission limits and to which there are exceptions to the incorporation of EPA Method 9.

JEA Northside/SJRPP:

1. To make Appendix CP-1 a part of the permit, it needs to be cross-referenced in subsection H of the permit either by adding a sentence to condition H.25 or by adding a separate requirement.

FPL Riviera:

1. The Statement of Basis should include the monitoring justification language from the initial Title V's SOB, since the language was originally included to resolve an objection issue.
2. Verify that the permit condition titled DEP Method 9 has been included for the units which have visible emission limits and to which there are exceptions to the incorporation of EPA Method 9.
3. Verify that the descriptions of the units listed in Appendix I-1 (insignificant activities) and Appendix U-1 (unregulated activities) include any applicable size thresholds (i.e., fuel oil tank sizes, emergency generator sizes, etc...) or content restrictions (i.e., halogenated vs. non-halogenated solvents.)
4. There is a typo in Table 2-1. We understand the table is for informational purposes only; however, for clarity, we suggest that you make Table 2-1 consistent with condition A.22 by including Method 5F for PM testing instead of Method 5C.
5. Since one of the comments received during the public comment period expressed concerns about environmental justice (EJ), EPA has requested a set of EJ maps and will forward those to you when we receive them.

If you have any questions, feel free to contact me at 404-562-9130.

Thanks,
Katy Forney
Air Permits Section
EPA - Region 4

21 West Church Street
Jacksonville, Florida 32202-3139

December 2, 2003

RECEIVED

DEC 04 2003

BUREAU OF AIR REGULATION



Mr. Scott Sheplak, P.E.
Administrator
Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

ELECTRIC

WATER

SEWER

RE: Northside Generating Station/St Johns River Power Park
Title V Permit (0310045-0011-AV)
Limestone Dryers/Mills (EU-033)

Dear Mr. Sheplak:

As a follow up to my letter of September 10, 2003, enclosed are the results for the limestone dryers/mills stack testing performed after implementation of the design fix to prevent the bags from rubbing together causing bag failure and completing start-up/shake-out of the units.

Attachment A provides the answers to the EPA guidance questions which support an exemption from CAM for the limestone dryers/mills.

If you have any questions or need additional information, please call me at (904) 665-6247.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Bert Gianazza".

N. Bert Gianazza, P.E.
Environmental Services

Enclosures

cc: Bruce Mitchell, P.E., FDEP

Attachment A

EPA Guidance Questions Pertaining to CAM Exemption Eligibility

The following three questions need to be answered in order to make a determination that a piece of equipment is inherent to the operation rather than strictly a control device.

1. Is the primary purpose of the equipment other than to control emissions relative to the applicable emissions limit (e.g., product recovery, worker safety)?

Answer: Yes, the equipment is necessary for product recovery and worker safety. Too much product would be lost and employees would be exposed to excessive concentrations of limestone particulates without the control equipment.

2. Would the equipment be installed if there were no applicable emissions limit in place for the pollutant specific emissions unit?

Answer: Yes, the control equipment is necessary to capture pneumatically conveyed product and minimize product losses and employee exposure.

3. Is the efficiency at which the equipment is operated by design for purposes other than compliance with the applicable emissions limit more than sufficient to assure compliance with the applicable emissions limit (e.g., a significant margin of compliance)?

Answer: Yes, the final stack test results show that the units operated with the below margins of compliance:

Limestone dryer A: 57% margin
Limestone dryer B: 47% margin
Limestone dryer C: 37% margin

Note: These were calculated using a more conservative 0.0100 limit, instead of the actual 0.01 limit, with one significant figure, which is typically interpreted as 0.0149.

The answer to all three questions is "yes," therefore the equipment qualifies as inherent process equipment for part 64 purposes. (And is, therefore, exempt from the CAM requirements for that particular pollutant.)

2/20/04

Wayne,

Sorry for the confusion. Yesterday, I printed the amended PSD permit, PSD-FL-010C, which established certain initial testing requirements and when a PM mass test is required for these activities. I will send you answers on Monday regarding your questions, after completing the review of the amendment and the Title V permit. First cut is that the amendment was not incorporated into the permit except in reference to a "Revised Table 6", which has been "revised" more than once, it seems. Therefore, a revision will be the appropriate course of action to incorporate the conditions established in the amendment. Take care.

Bruce

-----Original Message-----

From: Wayne Walker [mailto:WLW@coj.net]

Sent: Friday, February 20, 2004 1:55 PM

To: Mitchell, Bruce

Subject: St. Johns River Power Park (0045)

Bruce,

I'm currently reviewing SJRPP's annual PM & VE compliance test report, and I have a question regarding EUs 022 & 023, the Limestone & Flyash Handling system, and the Coal Storage Yard & Transfer system. The identification of and requirements for these two EUs are spread out over Title V permits, revised Conditions of Certification, PSD permit amendments, permit attachments, and revised tables. Can you please tell me what exactly the VE testing requirements are for these two EUs? Table 2-1 used to call for annual VE testing for both EUs, but since it was dropped from "Subsection C. Relevant Documents" beginning with the 008-AV renewal, the exact testing requirements as stated in the 011-AV permit are not clear to me. So if you would, please let me know a) which emission points under these two EUs require VE testing, and b) what are the required testing frequencies for each point.

Thanks,
Wayne

Table 5-1

AASI	Particulate Emissions Summary USEPA Method 17 (40 CFR Part 60 Appendix A) JEA Northside Jacksonville Fl. Limestone Dryer Unit A July 30, 2003 AASI USEPA Method 5.24 Point Template - Rev 2/1-15-2003									
------	--	--	--	--	--	--	--	--	--	--

Run		Time	Particulate Emissions		Volumetric Flow Rates		Stack		Sample Volume	Percent
Date	Number		GR/SCFD	LBS/HR	ACFM	SCFMD	Temp °F	Moisture %	SCFD	Isokinetic
7/30/2003	1	14:40 16:46	0.0058	1.59	43506	31753	203.6	8.4	69.181	99.2
7/31/2003	2	8:30 9:45	0.0025	0.76	48379	35618	202.5	7.7	71.044	93.8
7/31/2003	3	10:10 11:26	0.0046	1.29	45787	32978	210.0	8.7	66.160	94.3
Average			0.0043	1.21	45891	33450	205.4	8.3	68.795	95.8

$$\frac{0.01 - 0.0043}{0.01} \times 100 = 57\%$$

Table 2-5-1

AASI	<p>Particulate Emissions Summary USEPA Method 17 (40 CFR Part 60 Appendix A) JEA Northside Jacksonville Fl. Limestone Dryer Unit B September 19, 2003</p> <p>AASI USEPA Method 5.24 Point Template - Rev: 2/1-15-2003</p>
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Run			Particulate Emissions		Volumetric Flow Rates		Stack		Sample Volume	Percent
Date	Number	Time	GR/SCFD	LBS/HR	ACFM	SCFMD	Temp °F	Moisture %	SCFD	Isokinetic
9/19/2003	1	10:25 11:45	0.0058	1.45	38916	29368	189.4	7.5	62.287	97.4
9/19/2003	2	12:25 13:45	0.0047	1.19	39237	29379	190.1	8.1	61.301	95.8
9/19/2003	3	14:05 15:28	0.0056	1.36	38758	28502	189.6	9.8	60.256	97.1
Average			0.0053	1.33	38970	29083	189.7	8.5	61.281	96.7

$$\frac{0.01 - 0.0053}{0.01} \times 100 = 47\%$$

GRACE CONSULTING, INC.
Particulate Analysis

JEA
Limestone Dryer C
Northside Station
03-233-NC

Run Number			1	2	3
Date			10/8/2003	10/8/2003	10/8/2003
Location			Dryer C	Dryer C	Dryer C
Comment			Method 17	Method 17	Method 17
Start Time			10:25	12:25	14:05
End Time			11:55	13:55	16:55
Barometric Pressure	In. Hg.	Pb	30.2	30.2	30.2
Static Pressure	In. H2O	Pf	-0.13	-0.12	-0.12
Volume of Condensate	mls.	Vlc	97	104	111
Volume Sampled	dcf	Vm	65.925	64.097	65.952
Meter Correction Factor		Y	1.003	1.003	1.003
Square Root of Delta P			0.880	0.880	0.891
Orifice Pressure	In. H2O		1.860	1.774	1.863
Meter Temperature	Degree F		94	101	100
Flue Temperature	Degree F		200	200	202
Percent CO2	%		0	0	0
Percent O2	%		20.9	20.9	20.9
Diameter of Nozzle	In.		0.225	0.225	0.225
Area of Flue	Sq. ft.		11.54	11.54	11.54
Sample Time	min.		90	90	90
Weight Gain	grams		0.0382	0.0072	0.0319
Absolute Flue Pressure	in. Hg	Ps	30.19	30.19	30.19
Corrected Sample Volume	dscf	Vms	63.90	61.34	63.24
Moisture of Flue Gas	%	Bws	6.67%	7.39%	7.63%
Molecular Weight	lb/lb-mole	Ms	28.11	28.04	28.01
Velocity of Flue Gas	fps	Vs	55.79	55.87	56.68
Volume of Flue Gas	ACFM	Vo	38,631	38,684	39,245
Volume of Flue Gas	DSCFM	Qsd	29,104	28,920	29,174
Dust Concentration	lb/dscf	Wd	1.32E-06	2.59E-07	1.11E-06
Dust Concentration	lb/hr	Wh	2.30	0.45	1.95
Dust Concentration	gr/acf	Wa	6.95E-03	1.35E-03	5.79E-03
Dust Concentration	gr/dscf	Ws	9.23E-03	1.81E-03	7.79E-03
Isokinetic Rate	%	%I	102.0	98.5	100.7

Averages: Flue Temp.:	200.6667	Part. Emis: lb/dscf	8.96E-07
ACFM:	38,853	lb/hr	1.57
DSCFM:	29,066	gr/acf	4.70E-03
Percent O2:	20.90%	gr/dscf	6.28E-03

$$\frac{0.01 - 0.0063}{0.01} \times 100 = 37\%$$

Mitchell, Bruce

From: Gianazza, N. Bert [GianNB@jea.com]
Sent: Wednesday, October 29, 2003 9:10 AM
To: Mitchell, Bruce
Subject: FW: NGS/SJRPP Title V renewal - draft permit review



Title V renewal
permit comment...

For your consideration.

Tx, B.

-----Original Message-----

From: Holmes, Allan R. (Bob) [mailto:holmesar@bv.com]
Sent: Tuesday, October 28, 2003 3:24 PM
To: Gianazza, N. Bert
Cc: Hillman, Timothy M.
Subject: NGS/SJRPP Title V renewal - draft permit review

Bert,

I have reviewed the NGS/SJRPP Title V renewal draft permit and have included my comments in the attached letter. Please give me a call if you have any questions. Thanks.

<<Title V renewal permit comments.doc>>

Bob (Allan) Holmes
Air Permitting
Black & Veatch
(913)-458-2126



BLACK & VEATCH

8400 Ward Parkway
P.O. Box 8405
Kansas City, Missouri 64114

Black & Veatch Corporation

Tel: (913) 458-2000

JEA
Air Permitting

B&V Project 134838
October 28, 2003

Mr. Bert Gianazza
Environmental Services
21 West Church Street
Jacksonville, FL 32202-3139

Dear Bert:

I have reviewed the Title V Air Operation Permit Renewal – Draft Permit No. 0310045-011-AV for the JEA Northside Generating Station/St Johns River Park and have the following comments:

1. In the Table of Contents of the Title V Renewal Permit:
 - a. The size of NGS Boiler No. 3 should be 563.7 MW rather than 297.5 MW.
 - b. Emission unit 032 should not be included (was not part of the final as-built facility and is not included in the body of the Title V permit).
 - c. The description of emission units 029 through 053 should be revised to match the descriptions used in the body of the permit (see Section III on Page 83 of the renewal permit).
2. In Section I, Subsection B of the renewal permit, the Brief Description for emissions units 029 through 053 should be revised to match the descriptions used in Section III of the permit (see Section III on Page 83 of the renewal permit).
3. Permit conditions H.50 and I.31 include the language from 40 CFR 60.7(b) in the first sentence. However the second sentence is not from 40 CFR 60.7(b) and parts of this sentence do not appear to be applicable to the associated emission units. In regards to Condition H.50 pertaining to the CFB boilers, the portions of this condition regarding high fuel bound nitrogen content and malfunctioning CT would not apply to the CFB boilers. Condition I.31 pertains to the material handling emissions units and a recordkeeping system associated with high fuel bound nitrogen content, malfunctioning CT and periods when the CEMS is inoperable would not apply to the materials handling emissions units. I would suggest removing the second sentence of

this condition or revising this sentence to remove requirements that are not applicable to the associated emissions unit.

4. List of Insignificant Emission Units and/or Activities (Appendix I-1)
 - a. The list in Appendix I-1 does not include the SJRPP Emergency Diesel Fire Pump. Note that this addition to the list was made with the supplemental information package and this equipment is not on the existing Title V insignificant activities list.
 - b. The list in Appendix I-1 includes the specific listing of storage tanks rather than simply listing lube oil storage, hypochlorite storage, etc. In the original application we listed out the storage tanks as in the current Title V insignificant activities list. In the supplemental information package we simply listed the activities as lube oil storage, etc. and removed the detailed tank list.

5. List of Unregulated Emissions Units and/or Activities (Appendix U-1) – the list of tanks for NGS matches what was included in the initial renewal application and the existing Title V permit. However, we made changes to this list with the supplemental information package that did not make it into the draft permit. Changes with the supplemental information package included the removal of three smaller waste oil storage tanks and the smaller diesel storage tank (168,000 gallons) and the addition of another 4,578,000 gallon Bunker C Storage tank.

Should you have any questions, please do not hesitate to contact me at (913) 458-2126. Thank you.

Very truly yours,

BLACK & VEATCH

Bob Holmes,
Environmental Engineer

cc: Tim Hillman (e-mail)

9/30/03

Bert,

Thanks for the comments...the changes have been made. Let Bob know that I appreciate the comments that he made, for they were all pertinent and improved the product. In addition, I got a fax with attachments from Wayne Walker that put closure on SCs D.68., D.69. and D.70, and they have been relegated to "Reserved." Please let me know if you got my e-mail with the Public Notice attached for publishing!? Take care.

Bruce

-----Original Message-----

From: Gianazza, N. Bert [mailto:GianNB@jea.com]
Sent: Monday, September 29, 2003 1:38 PM
To: Mitchell, Bruce
Subject: FW: Subsections H & I: 0310045-011-AV.Renewal.

Bruce,

Please see minor comment below.

B.

-----Original Message-----

From: Holmes, Allan R. (Bob) [mailto:holmesar@bv.com]
Sent: Monday, September 29, 2003 12:57 PM
To: Gianazza, N. Bert
Cc: Hillman, Timothy M.
Subject: RE: Subsections H & I: 0310045-011-AV.Renewal.

Bert,

I have reviewed the revised draft permit sections. The changes that Bruce and I discussed are included in the revised draft. I have the following comments on the revised draft. Thanks.

Under Condition I.6.b, I suggest the following changes:

* Under Condition I.6.b.(1), add EU-028v to the emission units list in parenthesis.

* Under Condition I.6.b.(3), change "Limestone lowering well" to "Transfer building 5 and limestone loadout chute". This is the EU028d description given on page 83 (Subsection I) of the draft permit, and is what the facility is using for a description.

Bob (Allan) Holmes
Air Permitting
Black & Veatch
(913)-458-2126

> -----Original Message-----

> From: Gianazza, N. Bert [SMTP:GianNB@jea.com]
> Sent: Monday, September 29, 2003 10:46 AM

> To: Holmes, Allan R. (Bob)
> Subject: FW: Subsections H & I: 0310045-011-AV.Renewal.
>
> Bob, can you review the attachment and see if all the changes were
> captured? I'm busy fighting fires (what else is new?).
>
>
> Please let me know if you can take care of this today since this is
going
> out tomorrow.
>
>
>
> Tx, B.
>
>
>
> -----Original Message-----
> From: Mitchell, Bruce [mailto:Bruce.Mitchell@dep.state.fl.us]
> Sent: Monday, September 29, 2003 11:39 AM
> To: Gianazza, N. Bert
> Cc: Sheplak, Scott
> Subject: Subsections H & I: 0310045-011-AV.Renewal.
>
>
>
>
> 9/29/03
>
>
>
> Bert,
>
>
>
> Here's the latest version...hopefully, I was able to make all of the
> changes that Bob and I discussed. Take care.
>
>
>
> Bruce
> << File: SubsectionsH&I.0310045.011AV.Renewal.doc >>

**REGULATORY & ENVIRONMENTAL
SERVICES DEPARTMENT****AIR & WATER QUALITY DIVISION
117 W. DUVAL STREET, SUITE 225
JACKSONVILLE, FLORIDA 32202
(904) 630-3638 (FAX)
(3637)****FACSIMILE TRANSMITTAL SHEET**

TO:	FROM:
Mr. Bruce Mitchell	Wayne Walker
COMPANY:	DATE:
FDEP	9/30/2003
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
850-922-6979	9
PHONE NUMBER:	SENDER'S E-MAIL ADDRESS:
850-413-9198	<u>WLW@COJ.NET</u>
RE:	
SJRPP #1 & #2 Boilers	

Notes/Comments:

Bruce,

According to our records, SJRPP has fulfilled the requirements of permit conditions D.68. - D.70. for both the #1 & #2 boilers. Please see the following documentation & let me know if you need anything further.

You can reach me at the phone number below or the E-mail address above.

Thank you,

Wayne Walker

PLEASE CALL (904) 630-1212 ext. 3164 IF YOU DO NOT RECEIVE ALL THE PAGES OF THIS FAX OR IF TRANSMISSION IS UNCLEAR.

**** AWQD Calculations Check ****

Historical Test Data

St. Johns River Power Park
 Steam Generating Units #1 & #2
 Carbon Monoxide (CO) &
 Sulfuric Acid Mist (H2SO4) Emissions

Test Date	Unit #	CO, ppm	CO, #/hr.	CO, #/MMBtu	H2SO4, ppm	H2SO4, #/hr.	H2SO4, #/MMBtu	Comments
8/8/1995	1	35.90	224.28	0.0336	6.19	110.54	0.0165	Initial baseline tests on 100% bituminous Coal
8/19/1995	1	506.02	3,440.65	0.5150	10.54	205.26	0.0307	80% Coal, 20% Pet Coke
2/3/1997	1	NA	NA	NA	8.15	206.25	0.0341	Baseline test on 100% bituminous Coal
2/10/1997	1	NA	NA	NA	2.86	73.27	0.0122	Coal / Pet Coke blend; percentages unknown
6/4/1997	1	75.39	466.77	0.0672	4.08	89.48	0.0128	First Semi-Annual Coal/Pet Coke Test
6/5/1997	2	119.75	737.40	0.1141	5.62	127.95	0.0199	First Semi-Annual Coal/Pet Coke Test
11/3/1997	1	30.41	194.08	0.0350	4.15	91.29	0.0146	Semi-Annual Coal/Pet Coke Test
11/4/1997	2	88.25	551.14	0.0930	3.59	76.90	0.0134	" " " " "
5/19/1998	1	243.61	1,619.05	0.2780	7.29	168.28	0.0255	" " " " "
5/20/1998	2	90.80	617.43	0.0950	6.83	150.18	0.0224	" " " " "
10/12/1998	1	NA	NA	NA	14.90	354.45	0.0557	" " " " "
10/17/1998	2	35.73	236.78	0.0323	5.46	126.68	0.0193	" " " " "
10/18/1998	1	13.53	88.83	0.0133	4.74	108.99	0.0172	" " " " "
6/2/1999	1	48.61	307.30	0.0492	13.99	309.91	0.0495	" " " " "
6/3/1999	2	9.52	59.76	0.0095	11.53	246.99	0.0395	" " " " "
10/11/1999	1	260.50	1,887.46	0.2657	10.08	223.36	0.0364	" " " " "
10/14/1999	2	103.04	743.89	0.1002	10.28	220.71	0.0362	" " " " "
6/1/2000	1	42.85	273.80	0.0433	9.93	220.80	0.0348	" " " " "
6/2/2000	2	27.37	175.47	0.0276	1.71	36.99	0.0058	" " " " "
10/18/2000	1	70.04	476.08	0.0674	6.92	163.64	0.0246	" " " " "
12/19/2000	2	305.83	1,868.50	0.2909	12.24	260.75	0.0420	" " " " "
12/13/2001	1	187.46	1,389.00	0.2118	NA	NA	NA	Annual Coal/Pet Coke Test
12/12/2001	2	455.59	3,249.00	0.5055	NA	NA	NA	Annual Coal/Pet Coke Test

09-30-2003 09:42am From-Air & Water Quality 904 630 3538 T-252 P-002/009 F-918

**** AWQD Calculations Check ****

Historical Test Data

St. Johns River Power Park
 Steam Generating Units #1 & #2
 Particulate Matter (PM) &
 Nitrogen Oxides (NOx) Emissions

Test Date	Unit #	PM, #/hr.	PM, #/MMBtu	Test Date	Unit #	NOx, #/MMBtu
11/16/1994	1	17.15	0.0024			
11/15/1994	2	55.72	0.0093			
1/7/1995	1	80.05	0.0130			
1/7/1995	2	54.10	0.0087			
11/12/1996	1	46.53	0.0073			
11/21/1996	2	34.59	0.0053			
1/4/1997	1	29.88	0.0050			
1/3/1997	2	31.06	0.0050			
10/13/1998	1	49.86	0.0077	10/14/1998	1	0.4620
10/12/1998	2	29.16	0.0047	10/14/1998	2	0.4780
10/14/1999	1	33.97	0.0057	10/18/1999	1	0.5033
10/11/1999	2	19.30	0.0033	10/18/1999	2	0.4810
10/17/2000	1	102.36	0.0160	10/18/2000	1	0.4783
12/19/2000	2	24.78	0.0043	12/19/2000	2	0.4793
12/11/2001	1	62.93	0.0100	12/13/2001	1	0.4199
12/10/2001	2	32.45	0.0050	12/12/2001	2	0.4700
12/9/2002	1	31.76	0.0049	12/11/2002	1	0.4780
12/10/2002	2	17.16	0.0026	12/10/2002	2	0.4770

EV 99: 402

CERTIFIED MAIL

February 04, 1999

Mr. Hamilton Oven, P.E.
 Administrator, Power Plant Siting
 Florida Dept. of Environmental Protection
 2600 Elair 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.i. 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, (RESA) ✓
 S. Pace, (RESA)

EV 990810

August 10, 1999

Robinson
C.H. West

Mr. Syed Arif, P.E.
Florida Dept. Of Env. Protection
Air Resources Management
Magnolia Park Courtyard, Rm. 123
Tallahassee, FL 32301



RE: SEA/St. Johns River Power Park (SJRPP)
PSD-FL-010(B)
Conditions of Certification PA 81-13
CO (Carbon Monoxide) and H₂SO₄ (Sulfuric Acid) Mist
Semi-Annual Compliance Testing Completion

Dear Mr. Arif,

Pursuant to your review of our past two years of semi-annual stack testing data for CO/H₂SO₄ mist during petroleum coke co-firing with coal, as reviewed and prepared by Mr. Kennard F. Kosky, P.E., of Golder Associates, Inc. (see enclosure), we appreciate your concurrence during our telephone conversation of August 9, 1999, that SJRPP has successfully fulfilled the permit conditions of PSD Conditions 3.B. and C., and Specific Conditions I.A.2.h. and i., directing that semi-annual performance testing shall be performed, demonstrating that the change in operations did not result in significant increases in CO or H₂SO₄ mist emissions to the environment.

Co-firing with petroleum coke began in April, 1997, with the first test performed in June, 1997, with additional testing performed in 11/97, 5/98, 10/98, and 6/99. Your suggestion of performing the tests again during our scheduled RATA in October, 1999, shall be performed. This test shall fulfill the first year annual requirement as specified in PSD 3.B. and Specific Condition I.A.2.h for CO, directing that an additional three years of annual testing be performed, with the permitted annual requirements fulfilled in the year 2001. At this time, an additional compliance test report shall be submitted to your person for review. No additional H₂SO₄ mist testing is required pursuant to the permits.

Please contact me at (904) 665-8797 if you have any additional questions or comments.

Sincerely,

Mark K. Loechelt
Env. Production Assurance Leader

Enclosure: CO/H₂SO₄ Compliance Certification 02/04/99

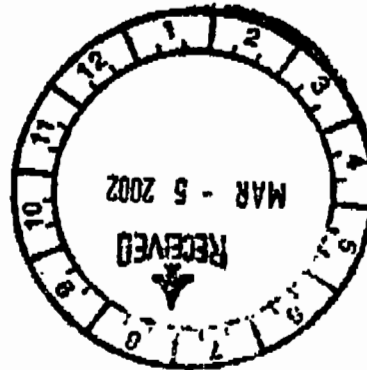
cc: H. Oven, FDEP
E. Frey, FDEP
S. Pace, RESD
W. Tutt, RESD

CERTIFIED MAIL

EV C20228



February 28, 2002



Mr. Hamilton Oven, P.E.
Administrator, Power Plant Siting
Florida Dept. of Environmental Protection
260C Blair Stone Rd.
Mail Station 48
Tallahassee, FL 32399-2400

RE: JEA/St. Johns River Power Park (SJRPP)
Conditions of Certification (COC) Permit No. PA 81-13
PSD Permit No. PSD-FL-010(D)
Title V Permit No. 0310045-002-AV
Emissions of Particulate Matter (PM) and Nitrogen Oxides (NOx)
Compliance Certification

Dear Mr. Oven:

WET

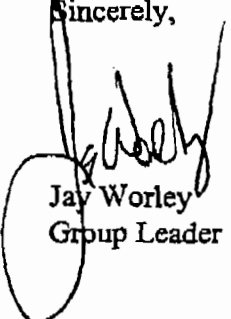
Pursuant to Specific Condition 1.A.2.g. of the COC permit, Specific Condition 3.A. of the PSD permit, and Specific Condition D.68 of the Title V permit, the permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially fired with 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 2001 co-firing emissions. The 2001 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 Conditions.

Pursuant to the above referenced permit language, this submittal satisfies the required 5 year testing period, indicating that significant net increases in emissions did not result from co-firing petroleum coke and coal. Having satisfactorily completed the listed Permit conditions, additional annual testing shall not be performed unless at the request of the Department.

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

Sincerely,



Jay Worley
Group Leader

Enclosure: PM/NO_x 2001 Compliance Certification

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

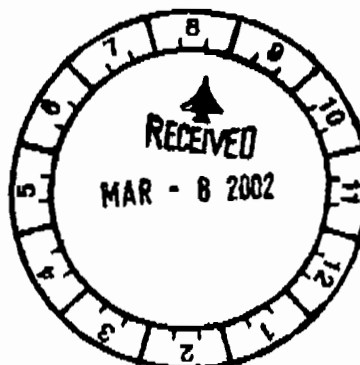
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 W 2/1
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CERTIFIED MAIL

EV C20228



February 28, 2002



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: JEA/St. Johns River Power Park (SJRPP)
 Conditions of Certification (COC) Permit No. PA 81-13
 PSD Permit No. PSD-FL-010(D)
 Title V Permit No. 0310045-002-AV
 Emissions of Particulate Matter (PM) and Nitrogen Oxides (NOx)
 Compliance Certification

Dear Mr. Oven:

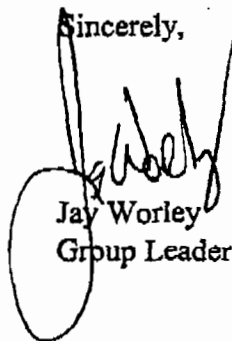
Pursuant to Specific Condition I.A.2.g. of the COC permit, Specific Condition 3.A. of the PSD permit, and Specific Condition D.68 of the Title V permit, the permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially fired with 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 2001 co-firing emissions. The 2001 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 Conditions.

Pursuant to the above referenced permit language, this submittal satisfies the required 5 year testing period, indicating that significant net increases in emissions did not result from co-firing petroleum coke and coal. Having satisfactorily completed the listed Permit conditions, additional annual testing shall not be performed unless at the request of the Department.

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

Sincerely,



Jay Worley
Group Leader

Enclosure: PM/NO_x 2001 Compliance Certification

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

Certified Mail



EV 03925

RECEIVED

September 25, 2003

SEP 29 2003

BUREAU OF AIR REGULATION

Mr. Mario Taylor
Florida Department of Environmental Protection
7825 Baymeadows Way, Suite 200B
Jacksonville, FL 32256-7577

RE: JEA/St. Johns River Power Park (SJRPP) Units #1 & 2
COC Permit No. PA-81-13
Title V Permit No. 0310045-002-AV
Notification of Annual Performance Test and Relative Accuracy Test Audit (RATA)

Dear Mr. Taylor,

The annual performance test, for the above facility, is required to be conducted as specific in the SJRPP Conditions of Certification and Title V permit.

The testing is tentatively scheduled to begin on October 27, 2003, in conjunction with the RATA of the Continuous Monitoring System (CEMS). In the event there is a change in the testing schedule your office will be notified.

Please contact me (904) 665-7886 if you have any questions or require any additional information.

Sincerely,

Bruce W Kofler
Production Leader- Environmental

xc: H. Oven, FDEP
B. Mitchell
W. Tutt, RESD
B. Banister, EPA

BEST AVAILABLE COPY

CERTIFIED MAIL



EV 010227

February 27, 2001

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

RE: JEA/St. Johns River Power Park (SJRPP)
Conditions of Certification PA 81-13
PSD Permit No. PSD-FL-010(D)
Title V Permit No. 0310045-002-AV
* Emissions of Carbon Monoxide (CO)
Compliance Certification

Dear Mr. Owen:

Pursuant to Specific Condition I.A.2.h. of the COC permit, Specific Condition 3.B. of the PSD permit, and Specific Condition D.69 of the Title V permit, the permittee shall maintain and submit to the Department on a semi-annual 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 demonstrating that the operational changes did not result in an emission increase of carbon monoxide. The carbon monoxide emissions shall be based on test results using EPA Method 10. Additionally, quarterly continuous emission monitoring data for carbon monoxide emissions shall be submitted to the Department for a period of two years to show the range of emissions experienced during each quarter.

Please find attached the analysis results, as prepared by Kennard Kosky, P.E. (Golder Associates), comparing baseline emissions when firing coal (1997 CEMS) and for the for the petroleum coke and coal co-firing emissions (1997-2000 EPA Method 10). The 1997-2000 emission rates for CO were similar to 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,

Jay Worley
Group Leader

Enclosure: CO 2000 Compliance Certification

cc: E. Frey, (FDEP)
A. Linero, (FDEP)
W. Tut, (RESO)
S. Pace, (RESO)

BEST AVAILABLE COPY

CERTIFIED MAIL

EV 010227

February 27, 2001



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

RE: JEA/St. Johns River Power Park (SJRPP)
Conditions of Certification (COC) Permit No. PA 81-13
PSD Permit No. PSD-FL-010(D)
Title V Permit No. 0310045-002-AV
* Emissions of Particulate Matter (PM) and Nitrogen Oxides (NOx)
Compliance Certification

Dear Mr. Owen:

Pursuant to Specific Condition I.A.2.g. of the COC permit, Specific Condition 3.A. of the PSD permit, and Specific Condition D.68 of the Title V permit, 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 2000 co-firing emissions. The 2000 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 Conditions.

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". Below the signature, the name "Jay Worley" and title "Group Leader" are printed in a small font. A large, hand-drawn oval is positioned below the signature.

Enclosure: PM/NO_x 2000 Compliance Certification

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

Mitchell, Bruce

From: Gianazza, N. Bert [GianNB@jea.com]
Sent: Monday, September 29, 2003 1:38 PM
To: Mitchell, Bruce
Subject: FW: Subsections H & I: 0310045-011-AV.Renewal.

Bruce,

Please see minor comment below.

B.

-----Original Message-----

From: Holmes, Allan R. (Bob) [mailto:holmesar@bv.com]
Sent: Monday, September 29, 2003 12:57 PM
To: Gianazza, N. Bert
Cc: Hillman, Timothy M.
Subject: RE: Subsections H & I: 0310045-011-AV.Renewal.

Bert,

I have reviewed the revised draft permit sections. The changes that Bruce and I discussed are included in the revised draft. I have the following comments on the revised draft. Thanks.

Under Condition I.6.b, I suggest the following changes:

* Under Condition I.6.b.(1), add EU-028v to the emission units list in parenthesis.

* Under Condition I.6.b.(3), change "Limestone lowering well" to "Transfer building 5 and limestone loadout chute". This is the EU028d description given on page 83 (Subsection I) of the draft permit, and is what the facility is using for a description.

Bob (Allan) Holmes
Air Permitting
Black & Veatch
(913)-458-2126

> -----Original Message-----

> **From:** Gianazza, N. Bert [SMTP:GianNB@jea.com]
> **Sent:** Monday, September 29, 2003 10:46 AM
> **To:** Holmes, Allan R. (Bob)
> **Subject:** FW: Subsections H & I: 0310045-011-AV.Renewal.

> Bob, can you review the attachment and see if all the changes were captured? I'm busy fighting fires (what else is new?).

> Please let me know if you can take care of this today since this is going out tomorrow.

> Tx, B.

> -----Original Message-----

> **From:** Mitchell, Bruce [mailto:Bruce.Mitchell@dep.state.fl.us]
> **Sent:** Monday, September 29, 2003 11:39 AM

> To: Gianazza, N. Bert
> Cc: Sheplak, Scott
> Subject: Subsections H & I: 0310045-011-AV.Renewal.
>
>
>
>
>
> 9/29/03
>
>
>
> Bert,
>
>
>
> Here's the latest version...hopefully, I was able to make all of the
> changes that Bob and I discussed. Take care.
>
>
>
> Bruce
> << File: SubsectionsH&I.0310045.011AV.Renewal.doc >>

9/30/03

Bert,

Here's the Public Notice for publishing. Thanks for all your input on this project. Take care.

Bruce

9/24/03

Bert,

Here's the Draft AC Permit for your review.

Bruce

9/24/03

Bert,

Here's the DRAFT Title V Permit Renewal for your review.

Bruce

9/24/03

Bert,

Here's the Subsections from the DRAFT Title V Permit Renewal and a draft Compliance Plan for untested EUs.

Bruce

9/23/03

Bert,

I have forwarded to you a spread sheet from Wayne Walker regarding some specific tests conducted on the CFB Boilers Nos. 1 and 2. Since you were going to be checking on some COMS data, please see if you can refine the data to these specific test dates on the spread sheet and during the tests. Many thanks. Look forward to hearing from you. Take care.

Bruce

-----Original Message-----

From: Wayne Walker [mailto:WLW@coj.net]

Sent: Monday, September 22, 2003 9:06 AM

To: Mitchell, Bruce

Cc: Wayne Tutt

Subject: JEA Northside CFB Boilers

Bruce,

Please see attached regarding PM, PM10 & VE compliance testing conducted on JEA Northside's 2 CFB boilers. I believe all the requested information we discussed Friday is included, but if not, let me know & I'll try to get whatever additional data you need.

Thanks.

Wayne Walker



BLACK & VEATCH

11401 Lamar Avenue
Overland Park, Kansas 66211 USA

Tel: (913) 458-2000

Black & Veatch Corporation

RECEIVED

SEP 02 2003

August 29, 2003

Mr. Bruce Mitchell
Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION

RE: DRAFT Supplemental Information Documents for Northside Generating Station/St Johns River Power Park Title V Renewal Application

Dear Mr. Mitchell:

Please find enclosed for review a DRAFT copy of documents associated with a supplemental information package that JEA is preparing for the JEA Northside Generating Station/St Johns River Power Park Title V Renewal Application. Bert Gianazza of JEA will be contacting you the week of September 1 to discuss the supplemental information package.

If you have any questions, please give Bert Gianazza a call at (904) 665-6247.

Sincerely,

Bob Holmes
Environmental Engineer
Black & Veatch

Enclosures

cc: Bert Gianazza, P.E., JEA

JEA Northside Generating Station and St Johns River Power Park Title V Renewal Application

1.0 INTRODUCTION

This Title V Permit renewal application is for the Northside Generating Station (NGS) and St Johns River Power Park (SJRPP) located in Jacksonville, Florida. As required by Florida Administrative Code regulations, JEA has prepared the Title V Operating Permit Renewal Application on the forms provided by the Florida Department of Environmental Protection (FDEP). Supplementary Appendices are included to support the information contained in the application forms.

The facility is currently operating under Title V Operation Permit Number 0310045-008-AV and Construction Permit Nos. PSD-FL-265 (3010045-003-AC) and PSD-FL-265A. Construction Permit No. PSD-FL-265 and PSD-FL-265A were issued to cover the repowering of NGS Units No. 1 and 2 to circulating fluidized bed (CFB) boilers No. 1 and 2 and ancillary equipment. An application for a Title V operation permit revision to cover the emissions units installed under Construction Permits PSD-FL-265 and PSD-FL-265A was previously submitted to FDEP, however a revised Title V permit has not yet been issued. This Title V renewal application includes information included in the Title V revision application as well as information on the remainder of the facility.

2.0 APPLICATION REVIEW POINTS

To assist in the Title V renewal process, we are presenting what we perceive to be the major points that will arise in processing the renewal application. These review points are presented below as well as a summary of how each is addressed in the permit application.

1. The Repowering project construction permit application included two scenarios for the materials handling operations. The base case scenario was used. While the base case scenario included a total of ten transfer buildings, a total of seven transfer buildings were included in the final construction (labeled Transfer Buildings No. 1 through 6 and the Plant Transfer Building). The PSD construction permit gives an opacity limit and test requirements to transfer towers as a group.
Addressed in application: Emissions Unit Information Section 3a indicates that ten transfer buildings were included in the PSD application base case scenario and seven transfer buildings were constructed and lists the transfer buildings with requested JEA nomenclature.
2. The as-built limestone transfer to the storage pile is via telescopic chute rather than a lowering well.
Addressed in application: Covered in application forms Emissions Unit Information Section 3a and in Construction/Modification part of Section I of the application. Application forms Emissions Unit Information Section 3a indicates limestone loadout is part of Transfer Building No. 5. (as was the case in the PSD construction permit application).

3. The NGS limestone feed system includes process equipment referred to as limestone feed system vent filters that were not included in the original PSD application or PSD permit. The limestone system vent filters are used to collect limestone dust and return it to the limestone feed system. They are located between the limestone storage silos and the injection of limestone into the CFBs. This equipment is included on the list of insignificant activities in Attachment F of the renewal application.
Addressed in application: Discussed in Construction/Modification part of Section I of the application and covered in Attachment F.
4. CAM Plans:
Addressed in application: CAM Plans are included in Attachment R of the application. CAM Plans are included for particulate matter for NGS CFB Nos. 1 and 2 (EU026 and EU027) and for SJRPP Unit Nos. 1 and 2 (EU016 and EU017).
5. In completing the compliance testing required by Construction Permit PSD-FL-265, it was found that it was not possible to conduct a few of the specified compliance tests. The following list summarizes the compliance tests that were not performed.
- Method 5 testing of EU034 is not possible. JEA has requested a waiver from the required Method 5 compliance testing on this emissions unit. This waiver request is currently being processed. This is addressed in Attachment K of this application.
 - Method 22 testing of the limestone dryer building was not conducted during the initial compliance testing, as an observer could not get an adequate sight line of the building vents from a position on the ground. Based on discussions during a July 2, 2003 meeting with FDEP and RESD personnel, the Method 22 testing will be conducted with the observer located at an elevated position on the plant site and the test report will be submitted as soon as it becomes available.
 - Initial Method 9 compliance testing on EU033 was conducted while firing natural gas rather than fuel oil, as these systems are not yet capable of firing fuel oil. Appropriate testing will be conducted within 60 days of the first day fuel oil is fired in these units. This is addressed in the compliance report and plan included in Attachment K.
- Addressed in application: Discussed in Emissions Unit Information Section 6 for EU033 and Section 7 for EU034, in Attachment P and in the compliance report and plan in Attachment K.
6. The VE test on EU028o (Plant Transfer Building) and the PM tests on EU035 were inadvertently omitted from the initial compliance testing. The compliance tests for these emission units have been scheduled and the test report will be submitted as soon as it becomes available.
Addressed in application: Covered in Emissions Unit Information Section 8 for EU035, in Attachment P and in Attachment K. Test results will be submitted to FDEP as soon as they become available.
7. In initial compliance testing a Method 9 was done for the limestone storage pile, however a Method 9 test on the limestone reclaim hoppers was inadvertently omitted. The compliance test for the limestone reclaim hoppers will be conducted as soon as practicable and the test report will be submitted as soon as it becomes available.
Addressed in application: Covered in Emissions Unit Information Section 3b, in Attachment P and in Attachment K.

8. Existing Title V Permit 0310045-008-AV includes evaporation of on-site generated boiler non-hazardous cleaning chemicals as an insignificant emissions unit and/or activity for NGS Boilers Nos. 1, 2 and 3 and SJRPP Boilers Nos. 1 and 2.
Addressed in application: Addressed as an insignificant activity in Attachment F and included in narrative for Emissions Unit Information Sections 1, 2, 17, 22 and 23 for NGS CFB Nos. 1 and 2, NGS Boiler No. 3 and SJRPP Boilers Nos. 1 and 2, respectively.
9. Based on previous correspondence with FDEP, use of coal treated with a latex binder at SJRPP is allowed based on the fact that FDEP determined that the binder falls under the classification of “chemical dust suppressant” and that its use was already allowed under the Title V permit. JEA would like to have the flexibility of using coal treated with the same types of binders in the NGS CFB Nos. 1 and 2.
Addressed in application: For SJRPP Boilers Nos. 1 and 2, the use of coal treated with binders is discussed in the narrative for Emissions Unit Information Section 22 and 23. JEA will submit a separate construction permit application seeking approval of use of coal treated with a binder(s) in NGS CFB Nos. 1 and 2.
10. The application instructions indicate that O&M procedures should be included in the application if they are required. Based on review of the regulations, the only Rule identified that pertains to the need for O&M procedures is Rule 62-296.700. It appears that this rule does not apply if the emissions unit received a PSD permit. In general, JEA follows O&M guidance provided by the equipment manufacturer and based on plant experience.
Addressed in application: Included for emission units that did not receive a PSD permit.
11. In the event that fly ash or bed ash needs to be loaded into trucks, the loadout system is equipped with an emissions capture system that is used to direct particulate matter back to the respective silo where emissions are controlled by the silo dust collector. Therefore, fly ash and bed ash loadout are part of the respective fly ash and bed ash silo emission units.
Addressed in application: Discussed in Emissions Unit Information Sections 10 and 11 for EU037 and EU038, respectively.
12. JEA previously submitted a construction permit application to allow for the flexibility to transfer fuel between NGS and SJRPP via trucks. The FDEP response to this construction permit application indicated that this activity would be considered an insignificant activity. JEA requests that the renewed Title V application include this activity in the list of insignificant activities.
Addressed in application: This activity is included in the list of insignificant activities in Attachment F of the application.
13. Future anticipated activities at SJRPP include removal of landfilled material (ash) for use off-site. A front-end loader will be used to dig the ash and load the material directly on licensed dump trucks which will haul the ash off-site. The stockpiled ash is expected to be moist and dust free.
Addressed in application: This activity is included in the list of insignificant activities in Attachment F of the application.

14. The renewed Title V permit should reflect removal of the equipment and emission units associated with the limestone dumping from the SJRPP dumper (listed as #18 in PSD Revised Table 6 – see Attachment T).
Addressed in application: Discussed in Emissions Unit Information Sections 25 for EU022.

3.0 NOTES ON EXISTING PERMIT CONDITIONS

As part of the renewal process, JEA is requesting that the Department consider the following comments on existing NGS and SJRPP permit conditions.

1. JEA recommends removing all conditions relating to EU001 and EU002 from the renewed Title V permit as these are no longer active emissions units. EU001 and EU002 will be used to track baseline data for old NGS Boiler No. 1 and old NGS Boiler No. 2, respectively.
2. JEA recommends removing condition A.3.b of operation permit 0310045-008-AV from the renewed operation permit. With the removal of EU001 and EU002 it is impossible to exceed the residual fuel oil consumption limit given in this condition.
3. Condition A.5 of Operation Permit 0310045-008-AV gives a VE standard and requires an annual PM compliance test. JEA recommends removing the reference to particulate matter testing from this condition since the condition gives a VE standard. Note that compliance testing requirements are given elsewhere in the permit.
4. JEA recommends that condition A.39 of Operation Permit 0310045-008-AV be modified to require reporting pertaining to use of “on-specification” used oil use only in years when “on-specification” used oil is fired. i.e. add “in years in which “on-specification” used oil is fired,” to the beginning of condition A.39 of operation permit 0310045-008-AV. Since there are years in which no “on-specification” used oil is fired, the need to report that “on-specification” used oil was not used can be avoided. *No! Still want a "0" if none was fired.*
5. JEA recommends not including Condition A.41 of Operation Permit 0310045-008-AV in the renewed operation permit as it applies when all three main NGS boilers and the auxiliary boiler are operated simultaneously. Because EU001 and EU002 have been removed from service, this condition is no longer valid. *Reserved*
6. JEA recommends removing conditions relating to the auxiliary boiler (EU014), as it has been removed from service. *subsection B. Reserved*
7. JEA recommends changing condition C.9 of operation permit 0310045-008-AV from “The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery.” to “The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis for each fuel delivery.” As long as the required analysis methods are used it should not matter if the analysis is provided by the vendor or if the facility has the analysis done.
8. Conditions D.68, D.69 and D.70 require the submittal of reports over a defined number of years. If the required submittals have been made and no more submittals are required, JEA recommends that these conditions be removed from the renewed operation permit.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
026	NGS – Circulating Fluidized Bed Boiler No. 2	NA	NA
027	NGS – Circulating Fluidized Bed Boiler No. 1	NA	NA
028	NGS – Materials Handling & Storage Operations	NA	NA
029	NGS – Crusher Building Baghouse Exhaust (DC1)	NA	NA
031	NGS – Fuel Silo Dust Collectors (DC2 and DC3)	NA	NA
033	NGS – Limestone Dryer/Mills	NA	NA
034	NGS – Limestone Prep Building Dust Collectors	NA	NA
035	NGS – Limestone Silo Bin Vent Filters	NA	NA
036	NGS – Fly Ash Transport Blower Discharge	NA	NA
037	NGS – Fly Ash Silo Bin Vents	NA	NA
038	NGS – Bed Ash Silo Bin Vents	NA	NA
042	NGS – AQCS Pebble Lime Silo Bin Vent	NA	NA
051	NGS – Fly Ash Slurry Mix System Vent	NA	NA
052	NGS – Bed Ash Slurry Mix System Vent	NA	NA
053	NGS – Bed Ash Surge Hopper Bin Vents	NA	NA
	Removed reference to limestone feed system vent filters - EU054		
003	NGS – Boiler No. 3	NA	NA
006	NGS – Combustion Turbine No. 3	NA	NA
007	NGS – Combustion Turbine No. 4	NA	NA
008	NGS – Combustion Turbine No. 5	NA	NA

Construction/Modification Information

1. Description of Proposed Project or Alterations:

This application is for renewal of the facility Title V air operation permit. A Title V revision application was submitted to the FDEP dated August 5, 2002. The Title V revision application was associated with construction conducted under construction permit PSD-FL-265 and the application for construction permit PSD-FL-265. Revisions to construction permit PSD-FL-265 are included in construction permit PSD-FL-265A. For the material handling and storage operations covered under emissions unit 028, the base case scenario rather than the Alternative #1 scenario, as presented in the construction permit application was used. Therefore, emission units identified with the Alternate 1 scenario are not included in this application. The as-built facility differs from the construction permit application as follows:

- Conveyors D-10, D-11, D-12, D-13 and D-14 and new transfer towers #1A, 2A, 3A and 4A (all included as part of EU028g) were not constructed and are not included in this application.
- Loading to the limestone storage pile (EU028d) is by telescopic chute rather than with a lowering well. Limestone transfer via telescopic chute is included with Transfer Building No. 5.
- Emission points for new coal/pet coke and limestone unloading and handling operations at St. John's River Power Park (SJRPP) facility (EU028b, EU043, EU044 and EU045) included in the application for permit PSD-FL-265 base case scenario were not constructed and are not included in this application.
- The application for permit PSD-FL-265 gave alternative emission control strategies for the CFB boilers (EU026 and EU027). The control strategy used is a lime slurry spray dryer absorber followed by a baghouse (discussed in Section III of this application).
- Process equipment referred to as limestone feed system vent filters was installed to collect limestone dust and return it to the limestone feed system. This process equipment is located between the Limestone Silos and the injection of limestone into the CFBs. This process equipment is included as an insignificant activity in Attachment F of this application.
- JEA requests that the naming of some of the emission units be changed to match the nomenclature being used by the Facility. Any such requests are called out in Section III for the respective emission units.

2. Projected or Actual Date of Commencement of Construction:

3. Projected Date of Completion of Construction:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Material handling and storage operations consisting of Vessel Hold (EU028a), Vessel Unloader and Spillage Conveyor (EU028a), Limestone Storage Pile (EU028p) and Limestone Reclaim Hoppers (EU028p).</p>			
<p>4. Emissions Unit Identification Number: ID: 028</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date:</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters) This information section includes emissions unit 28 emission sources that have a 10% opacity limit. These emission sources include the following:</p> <ul style="list-style-type: none"> • Vessel Hold (EU028a) (referred to as Shiphold in construction permit PSD-FL-265) • Vessel Unloader and Spillage Conveyor (EU028a) • Limestone Storage Pile (EU028p) • Limestone Reclaim Hoppers (EU028p) 			

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? EU028p and EU28a		2. Emission Point Type Code: 4	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
<ul style="list-style-type: none"> • Vessel Hold (EU028a) (referred to as Shiphold in construction permit PSD-FL-265) is the hold of the vessel from which the material is being unloaded at the new Northside dock. • Vessel Unloader and Spillage Conveyor (EU028a) includes the vessel unloading operations at the new Northside dock. • Limestone Storage Pile (EU028p) • Limestone Reclaim Hoppers (EU028p) 			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: F	6. Stack Height: feet	7. Exit Diameter: feet	
8. Exit Temperature: 77°F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: acscfm		12. Nonstack Emission Point Height: Varies feet	
13. Emission Point UTM Coordinates:			
Zone:	East (km):	North (km):	
14. Emission Point Comment (limit to 200 characters): Fugitive emissions from the vessel hold and the vessel unloader and spillage conveyors are associated with limestone, coal and pet coke unloading operations at the new Northside dock. Fugitive emissions from the limestone storage pile include emissions from loading to the pile via a telescopic chute, emissions resulting from wind erosion and emissions from pile maintenance. Fugitive emissions from the limestone reclaim hoppers include emissions from removal of limestone from the pile via the limestone reclaim hoppers.			

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Vessel Hold - Coal or Pet Coke Vessel Unloader and Spillage Conveyor – Coal or Pet Coke		
2. Source Classification Code (SCC): 30501099		3. SCC Units: Tons handled
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 2,420,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limit of 2.42 million tons per year coal/pet coke included in construction permit PSD-FL-265.		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Vessel Hold - Limestone Vessel Unloader and Spillage Conveyor – Limestone		
2. Source Classification Code (SCC): 30501099		3. SCC Units: Tons handled
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 1,450,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limits of 1.45 million tons per year limestone included in construction permit PSD-FL-265.		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Limestone storage pile – limestone (EU028p)		
2. Source Classification Code (SCC): 30501099		3. SCC Units: Tons handled
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 1,450,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limits of 1.45 million tons per year limestone included in construction permit PSD-FL-265.		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Limestone reclaim hoppers – limestone (EU028p)		
2. Source Classification Code (SCC): 30501099		3. SCC Units: Tons handled
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 1,450,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limits of 1.45 million tons per year limestone included in construction permit PSD-FL-265.		

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: V10	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Using EPA Method 9, initial visible emissions compliance testing was conducted to show compliance with the visible emissions limit.	
5. Visible Emissions Comment (limit to 200 characters): The 10 percent opacity limit applies to the Vessel Hold, Vessel Unloader and Spillage Conveyor, the Limestone Storage Pile and the Limestone Reclaim Hoppers. The visible emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265 and PSD-FL-265A.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: V05	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Using EPA Method 9, initial visible emissions compliance testing was conducted to show compliance with the visible emissions limit.	
5. Visible Emissions Comment (limit to 200 characters): This 5% opacity limit is from Rule 62-296.711 and applies to affected facilities when processing coke.	

**H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)**

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: V05	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Using Method 9, an initial compliance test was conducted. Because fuel oil has not yet been fired and the dryers are not yet set up to physically fire fuel oil, the initial compliance tests were conducted while firing natural gas. Construction permit PSD-FL-265 requires an initial VE compliance testing while operating on fuel oil. JEA will conduct the required VE test when operating with fuel oil within a specified time frame following initial firing of fuel oil in these emissions units. This is addressed in the compliance plan included in Attachment K. In subsequent years, compliance testing while firing fuel oil will be conducted if fuel oil is fired for more than 400 hours in the previous federal fiscal year. At a minimum, a compliance test will be conducted once every five years.	
5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265.	

**H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)**

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

2. Visible Emissions Subtype: V07	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 7 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Using Method 9, an initial compliance test was conducted.	
5. Visible Emissions Comment (limit to 200 characters): This visible emissions limit is from NSPS Subpart OOO.	

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): NGS – Limestone Feed System Vent Filter Exhaust			
4. Emissions Unit Identification Number: <input type="checkbox"/> No ID ID: <input type="checkbox"/> ID Unknown			
5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit? <input type="checkbox"/>
9. Emissions Unit Comment: (Limit to 500 Characters)			
The Emissions Unit Information Section (pages 247 through 259) for the limestone feed system vent filters was removed as part of the August, 2003 supplemental information submittal. This equipment is instead included as an insignificant activity in Attachment F.			

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Attachment F

List of Insignificant and Unregulated Activities

List of Proposed Insignificant Activities

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

Brief Description of Emissions Units and/or Activities:

I. Northside Generating Station.

A. Storage Tanks.

1. JEA Tank	Magnesium Oxide	9,600 gallons
2. JEA Tank	Petrolite	6,500 gallons
3. JEA Tank	Lube Oil - Unit 1	10,000 gallons
4. JEA Tank	Lube Oil - Unit 2	10,000 gallons
5. JEA Tank	Mineral Acid	11,500 gallons
6. JEA Tank	Mineral Acid	11,500 gallons
7. JEA Tank	Caustic - East	10,000 gallons
8. JEA Tank	Caustic - West	10,000 gallons
9. JEA Tank	Hypochlorite	12,000 gallons
10. JEA Tank	Hypochlorite	12,000 gallons
11. JEA Tank	Lube Oil	18,000 gallons
12. JEA Tank	Lube Oil	7,000 gallons

II. St. Johns River Power Park.

A. AQCS Emergency Generator.

1. The emergency generator has historically fired less than 10,000 gallons per year of diesel fuel. The emergency generator draws its fuel from a single diesel fuel oil storage tank (the fuel oil has a maximum fuel sulfur content limit of 0.76%, by weight).

B. Power Block Emergency Generator.

1. The emergency generator has historically fired less than 10,000 gallons per year of diesel fuel. The emergency generator draws its fuel from a single diesel fuel oil storage tank (the fuel oil has a maximum fuel sulfur content limit of 0.76%, by weight).

C. Storage Tanks.

1. JEA Tank	Lube Oil	10,000 gallons
2. JEA Tank	Lube Oil	18,000 gallons
3. JEA Tank	Sulfuric Acid	6,000 gallons
4. JEA Tank	Sulfuric Acid	10,000 gallons
5. JEA Tank	Sulfuric Acid	6,000 gallons
6. JEA Tank	Sulfuric Acid	6,000 gallons
7. JEA Tank	Caustic	10,000 gallons
8. JEA Tank	Caustic	6,000 gallons
9. JEA Tank	Hydrazine	6,000 gallons
10. JEA Tank	Hypochlorite	6,000 gallons

III. NGS Boilers Nos. 1, 2 and 3, and SJRPP Boilers Nos. 1 and 2.

1. Evaporation of on-site generated boiler non-hazardous cleaning chemicals (cirtosolv and ammonia). This activity occurs once every three to five years or longer.

IV. NGS and SJRPP Solid Fuel Handling.

Solid fuel handling alternate operating scenario with capability to transport, using trucks, solid fuel (coal and petroleum coke) between the respective solid fuel handling facilities at NGS and SJRPP in the event of equipment failure, fuel delivery disruption or disproportionate fuel inventory.

V. SJRPP Removal of Landfilled Material.

Future anticipated activities at SJRPP include removal of landfilled material ash for use off-site. A front-end loader will be used to dig the ash and load the material directly on licensed dump trucks which will haul the ash off-site. The stockpiled ash is expected to be moist and dust free.

VI. NGS Limestone Feed System Vent Filter Exhaust.

Emissions from this equipment are far below the threshold level of 5 tons per year (tpy) given in 62-213.430(6)(b).3 for classifying an activity as insignificant. See the discussion at the end of this attachment.

VII. SJRPP Emergency Diesel Fire Pump

This equipment falls under the category of fire and safety equipment.

List of Unregulated Emission Units/Activities

Unregulated Emissions Units and/or Activities. 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.

Brief Description of Emissions Units and/or Activities:

I. Northside Generating Station.

-aaa Storage Tanks.

1. JEA Tank	Bunker C Storage	4,578,000 gallons
2. JEA Tank #12	Diesel Storage	4,200,000 gallons
3. JEA Tank #13	Diesel Storage	4,200,000 gallons
4. JEA Tank #14	Diesel Storage	4,200,000 gallons
5. JEA Tank	Waste Oil Storage - Unit 1	750 gallons
6. JEA Tank	Waste Oil Storage - Unit 2	1,000 gallons
7. JEA Tank	Waste Oil Storage - Unit 3	575 gallons
8. JEA Tank	Bunker C Storage	4,578,000 gallons
9. JEA Tank	Bunker C Storage	4,578,000 gallons
10. JEA Tank	Bunker C Storage	11,256,000 gallons
11. JEA Tank	Bunker C Storage	11,256,000 gallons

Att. G.

12. JEA Tank	Bunker C Storage	11,256,000 gallons
13. JEA Tank #10	Diesel Storage	168,000 gallons
14. JEA Tank #11	Diesel Storage	4,200,000 gallons

II. St. Johns River Power Park.

-bbb Storage Tanks.

1. JEA Tank: Emergency Diesel Fire Pump	Diesel Fuel Storage	1,123 gallons
2. JEA Tank: AQCS Emergency Diesel Generator Day Tank	Diesel Fuel Storage	561 gallons
3. JEA Tank	Diesel Fuel Storage	636,106 gallons
4. JEA Tank: Coal/Limestone Fuel Storage	Diesel Fuel Storage	10,069 gallons
5. JEA Tank: Ash Landfill Fuel Storage	Diesel Fuel Storage	10,069 gallons
6. JEA Tank: Power Block Emergency Generator Fuel Storage	Diesel Fuel Storage	4,015 gallons
7. JEA Tank	Gasoline Storage	10,069 gallons

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Engin.
List of Exempt Activities

Indoor sand blasting and abrasive grit blasting where temporary enclosures are used to contain particulates

Coal pile runoff ponds

Open stockpiling of material

Plant grounds maintenance

Routine maintenance/repair activities such as cleaning, welding, non-asbestos insulation removal, hand held tools/equip., meter repair/maintenance, on-line/off-line cleaning of equip.

Main steam pressure/relief valves; steam from boiler operations

Indoor fugitives such as vacuum cleaning, solvent storage, office supplies/equipment

Testing equipment such as CEMs, stack sampling calibration gases, oxygen detector

Internal combustion engines which drive compressors, generators, water pumps, or other auxiliary equipment

HVAC (heating, ventilation, and air conditioning systems)

Vent/exhaust systems for:

- Print room storage cabinets
- Transformer vaults/bldg.
- Maint./welding bldgs.
- Operating equipment vents
- Degasifier/dearators/decarbonators
- Air blowers/evacuators/air locks
- Feedwater heater vents

Transformers, switches, and switchgear processing (including cleaning and changing)

Use of nitrogen cap during boiler shut-down

Generator venting

Vent/exhaust from kitchen and breakrooms

Vents/stacks for sewer lines or enclosed areas req. for safety or by code

Electrically heated equipment used for heat treating, tracing, drying, soaking, case hardening or surface conditioning

Sewage treatment fac./equip. ranging in size from porta-john to sewage treatment plants

Steam releases

Storage and use of chemicals solely for water/waste water treatment

Neutralization basins/ponds, ash pits/ponds, TETF/ENU, percolation, equalization

Transfer sumps

Firefighting training facilities Turbine vapor extractor

Lawn maintenance equipment/activities

Application of fungicide, herbicide, pesticide

Air compressors and centrifuges used for compressing air

Handling and removal of clinkers, slag and bottom ash

Recovered materials recycling systems including bulb/crushers, aerosol can puncturing

Waste accumulation/consolidation

Compressed air system

Storage tanks less than 550 gallons

Storage of products in sealed containers

Nuclear gauges used for the purpose of process monitoring

Hydrogen and acid venting from battery rooms vacuum vents for gypsum dewatering bldg.

Flue gas desulfurization system absorber feed tank mist eliminator/spray header vent

Renovation/demolition of asbestos

Fires

Chemical spills, leaks & transfers

Oil spills, leaks & change out

Insulating activities

Asphalt or concrete sealing

High pressure water blasting

Excavation for construction activities

Chemical cleaning

Boiler

Turbine

Heat exchanger

Misc. plant machinery

Solvent cleaning (parts & circuit boards)

Cleaning furnace bottoms or slag removal

Welding all types

Cutting all types

Milling & machining

Sanding or grinding – all types

Emissions from portable equipment

Welding machines (diesel or gas)

Pumps (diesel or gas)

Sweeping

Pipe line repairs

Fly ash

Bottom ash

Slurry or sludge transfer

Fuel line

Process water (cooling water, ash water or condensate)

Refuse transport line

Miscellaneous other process lines

Bag house repairs

Filter change out (oil & air)

Air conditioner repairs

Battery maintenance

Coal feeder maintenance

Refuse feeder maintenance

Other miscellaneous maintenance

Bottom ash removal (from boilers)

Fuel oil storage tank cleaning

Small parts washing using parts washer

A/C servicing by licensed contractor

Searching for condenser leaks using helium

Stack washing (water, soot)

Cleaning and dewatering of ash basins (heavy equipment/pumps)

Engine rebuilding

Lube oil changes

Receiving fuel oil (trucks & pipeline)

Aerosol can use (cleaners, etc.)

Boiler chemical cleaning (cirtosolv & ammonia)

Sootblowing

Liming the boilers (CaOH)

Turbine washing

Boiler gun cleaning (guns dipped into vats of solvent)

Vehicle servicing (oil changes, antifreeze changes, etc.)

Soldering of electrical components (silver, tine solder)

Portable equipment and tools, including electric and gasoline powered

Electro plating

Welding, grinding and cutting activities (metal fumes)

Machining metal parts (cutting oil, metal fumes)

Cleaning condensers (water vapor, “snoop”)

Oil spills (#6, #2, turbine lube oil)

Oil-filled electrical equipment vents

Storage and use of boiler chemicals (phosphates, ammonia, hydrazine, magnesium oxide, sodium tripolyphosphate, soda ash, di- and tri-sodium phosphate)

Fume hood in laboratory

Laboratory equipment

Space heaters

Fire and safety equipment

Emergency generators

Mercury containing equipment such as manometers

Non-chlorinated solvent degreasing equipment

Vacuum pumps in laboratory operations

Equipment use for steam cleaning

Lime storage silo

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Basis for designating the limestone feed system vent filters as an insignificant activity

The limestone feed system vent filters are part of the limestone feed process and are located downstream of the Limestone Feed Silos (EU035) and prior to limestone injection into the circulating fluidized bed (CFB) boilers. The limestone feed system vent filters are used to collect limestone dust and return it to the limestone feed process. There is a total of six limestone feed system vent filters, three per CFB. The intake to the limestone feed system vent filters is from pickup points on limestone rotary feeders. The estimated pre-filter and post-filter particulate matter (PM) and PM₁₀ emissions are shown in the following table. An emission factor from AP-42 Section 11.19 Crushed Stone Processing (dated 1/95) was used to estimate PM and PM₁₀ in the vent filter exhaust. The AP-42 emission factor for a transfer point most closely matches this operation. The emission estimates show that based on the annual permitted limestone use rate of 1.45 million tons per year, potential emissions of PM and PM₁₀ for all limestone feed system vent filters combined are 0.02 and 0.01 tons per year, respectively. This analysis demonstrates that emissions of PM and PM₁₀ are far below the threshold level of 5 tons per year (tpy) given in 62-213.430(6)(b).3 for classifying an activity as insignificant. The following table also shows that pre-filter potential emissions are also below the 5 tpy threshold. The other two criteria of 62-213.430(6)(b) used to classify an activity as insignificant are also met. The limestone feed system vent filters are not subject to unit-specific applicable requirements (62-213.430(6)(b).1) and because it is clearly established in this application that the facility exceeds the major source thresholds for PM and PM₁₀, this activity would not be the cause for exceeding such thresholds (62-213.430(6)(b).2).

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NGS Limestone Feed System Vent Filter Exhaust

Calculation of PTE using crushed stone emission factors

Basis: There are six limestone feed system vent filter exhausts, three per CFB unit.

The vent filter collects limestone dust and returns it to the process.

Each feed system vent consists of two pickup points off of rotary feeders.

The emission calculations below are for all limestone feed system vent filter exhausts combined and are based on the maximum permitted annual limestone use rate.

Process rate (ton/yr)	Breakdown of process	Number of transfer points as part of system	PM ₁₀ Emission factor ⁽¹⁾⁽³⁾ (lb/ton)	Pre fabric filter PM ₁₀ PTE (lb/yr)	Pre fabric filter PM ₁₀ PTE (tpy)	Fabric filter collection efficiency (%)	Post fabric filter PM ₁₀ PTE (tpy)	PM Emission factor ⁽²⁾⁽³⁾ (lb/ton)	Pre fabric filter PM PTE (lb/yr)	Pre fabric filter PM PTE (tpy)	Fabric filter collection efficiency (%)	Post fabric filter PM PTE (tpy)
1,450,000	Transfer point	2	0.0014	4,060	2.03	99.5%	0.01	0.00294	8526	4.26	99.5%	0.02

Notes:

- (1) Emission factors taken from AP-42 Section 11.19.2 Crushed Stone Processing (dated 1/95), Table 11.19.2-2. The emission factor most closely matching this process is that for a transfer point.
- (2) Based on footnote c of Table 11.19.2-2, TSP emission factors may be estimated by multiplying the PM₁₀ emission factors by 2.1.
- (3) A revised version of AP-42 Section 11.19.2 (dated 6/03) currently out for public comment includes transfer point emission factors that are slightly lower than those used in these calculations.

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Attachment K

Compliance Report and Plan

Compliance Report and Plan

The following list is a summary of compliance issues covering the period of January 1, 2003 through the date of submittal of the renewal application.

- The following initial compliance tests required by Construction Permit PSD-FL-265 have not been completed.
 - Method 9 visible emissions test on the Limestone Reclaim Hoppers (EU028p)
 - Method 9 visible emissions test on the Plant Transfer Building (EU028o)
 - Method 22 on the Limestone Prep Building
 - Method 5 particulate matter test on the Limestone Storage Silos (EU035)These tests will be conducted as soon as practicable under the following compliance plan:
 - Required notification of the compliance test dates will be made to FDEP.
 - Stack testing will be performed in accordance with appropriate EPA/FDEP test methods.
 - FDEP will be notified when a compliance test has been completed.
 - JEA will submit the results of each compliance test to FDEP within 45 days of completion of that compliance test.
- The initial Method 5 particulate matter compliance test required by Construction Permit PSD-FL-265 on the Limestone Prep Dust Collectors (EU034) has not been completed. Due to the configuration of this emissions unit and stack, conducting a Method 5 test is not possible. JEA has requested a waiver from this compliance testing requirement and a decision on this request has not yet been made. JEA will act on the resolution of the waiver request and required actions that may result following resolution of this issue.
- For the limestone dryer/mills (EU073), the initial Method 9 visible emissions compliance test was not conducted while firing fuel oil in the dryers as required by Construction Permit PSD-FL-265. This emissions unit was permitted to fire both natural gas and fuel oil. Because the capability to fire fuel oil in these units has not yet been constructed, the initial compliance test used to demonstrate compliance with the visible emissions limit was conducted with natural gas. An initial Method 9 visible emissions compliance test will be conducted on the Limestone dryer/mills while the dryer/mills are firing fuel oil within 60 days of the first day fuel oil is fired in the limestone dryer/mills. The compliance test will be conducted under the following compliance plan:
 - Required notification of the compliance test dates will be made to FDEP. *the permit*
 - Stack testing will be performed in accordance with appropriate EPA/FDEP test methods.
 - ~~FDEP will be notified when a compliance test has been completed.~~
 - JEA will submit the results of each compliance test to FDEP within 45 days of completion of that compliance test.

If new regulatory requirements become applicable in the future, or if any non-compliance items are discovered after submittal of this application, the necessary steps will be taken to ensure compliance in a timely manner. This is in accordance with company policy of maintaining continuous compliance with all applicable rules and regulations.

Draft

Attachment L

Compliance Certification

Compliance Certification

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which the compliance report in Attachment K is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Signature

Date

Draft

Draft

Attachment P

Compliance Test Reports

Submittal Date of Compliance Test Reports

EU ID#	EU Description	Compliance test reports	Date of submittal
EU26	NGS – Circulating Fluidized Bed Boiler No. 2	Initial or quarterly PM compliance test while firing pet coke	7/3/02
		Initial PM compliance test while firing coal	8/13/02
		Initial or annual PM ₁₀ compliance test while firing pet coke	7/3/02
		Initial PM ₁₀ compliance test while firing coal	8/13/02
		Initial VOC compliance test while firing pet coke	7/3/02
		Initial VOC compliance test while firing coal	8/13/02
		Initial lead compliance test while firing pet coke	7/3/02
		Initial lead compliance test while firing coal	1/15/03
		Initial sulfuric acid mist compliance test while firing pet coke	8/26/03
		Initial sulfuric acid mist compliance test while firing coal	8/13/02
		Initial hydrogen fluoride compliance test while firing pet coke	7/3/02
		Initial hydrogen fluoride compliance test while firing coal	8/13/02
		Initial mercury compliance test while firing pet coke	7/3/02
		Initial mercury compliance test while firing coal	8/13/02
EU27	NGS – Circulating Fluidized Bed Boiler No. 1	Initial or quarterly PM compliance test while firing pet coke	12/10/02
		Initial or annual PM ₁₀ compliance test while firing pet coke	12/10/02
		Initial VOC compliance test while firing pet coke	11/12/02
EU028a	Vessel Hold	Initial VE compliance test	8/13/02
EU028a	Vessel Unloader & Spillage Conveyors	Initial VE compliance test	8/13/02
EU028	Belt Conveyor No. 1	Initial VE compliance test	8/13/02
EU028c	Transfer Building No. 1	Initial VE compliance test	8/13/02
EU028g	Transfer Building No. 2	Initial VE compliance test	8/13/02
EU028i	Transfer Building No. 3	Initial VE compliance test	8/13/02
EU028q	Transfer Building No. 4	Initial VE compliance test	8/13/02
EU028d	Transfer Building No. 5 and Limestone Chute	Initial VE compliance test	10/2/02
EU028h	Fuel Storage Domes A and B	Initial VE compliance test	8/13/02
EU028v	Transfer Building No. 6	Initial VE compliance test	10/2/02
EU028o	Plant Transfer Building	Initial VE compliance test	See Compliance Plan
EU028p	Limestone Storage Pile	Initial VE compliance test	8/13/02
EU028r	Limestone Reclaim Hoppers	Initial VE compliance test	See Compliance Plan
EU029	NGS – Crusher Building Baghouse Exhaust (DC1)	Initial VE compliance test	8/13/02
EU031	NGS – Fuel Silo Dust Collectors (DC2 and DC3)	Initial VE compliance test	8/13/02
EU033	NGS – Limestone Dryer/Mills	Initial PM compliance test	5/8/03
		Initial VE compliance test	8/13/02
EU034	NGS – Limestone Prep Building Dust Collectors	Initial PM compliance test	See Compliance Plan
		Initial VE compliance test	8/13/02
Limestone Prep Building	NGS – Limestone Prep Building	Initial Method 22 VE compliance test	See Compliance Plan
EU035	NGS – Limestone Feed Silo Bin Vents	Initial PM compliance test	See Compliance Plan
		Initial VE compliance test	8/13/02
EU036	NGS – Fly Ash Transport Blower Discharge	Initial VE compliance test	8/13/02
EU037	NGS – Fly Ash Silo Bin Vents	Initial VE compliance test	8/13/02
EU038	NGS – Bed Ash Silo Bin Vents	Initial VE compliance test	8/13/02
EU042	NGS – AQCS Pebble Lime Silo Bin Vent	Initial VE compliance test	8/13/02
EU051	NGS – Fly Ash Slurry Mix System Vents	Initial VE compliance test	8/13/02
EU052	NGS – Bed Ash Slurry Mix System Vents	Initial VE compliance test	8/13/02
EU053	NGS – Bed Ash Surge Hopper Bin Vents	Initial VE compliance test	8/13/02
EU003	NGS – Boiler No. 3	Annual PM Compliance test	10/29/02
		Annual SO ₂ compliance test	10/11/02
		Annual VE compliance test	10/29/02
EU006	NGS – Combustion Turbine No. 3	Annual VE compliance test	9/25/01
EU007	NGS – Combustion Turbine No. 4	Annual VE compliance test	9/26/01
EU008	NGS – Combustion Turbine No. 5	Annual VE compliance test	5/23/01
EU009	NGS – Combustion Turbine No. 6	Annual VE compliance test	5/27/01
EU016	SJRPP - Boiler No. 1	Annual PM Compliance test	1/22/03
		Annual NO _x Compliance test	1/22/03
		Annual SO ₂ compliance test	1/22/03
		Annual VE compliance test	1/22/03
EU017	SJRPP - Boiler No. 2	Annual PM Compliance test	1/22/03
		Annual NO _x Compliance test	1/22/03
		Annual SO ₂ compliance test	1/22/03
		Annual VE compliance test	1/22/03
EU023	SJRPP - Coal Storage Yard and Transfer Systems	VE compliance tests	1/22/03
EU022	SJRPP - Limestone and Flyash Handling	Annual VE compliance tests	1/22/03

From: DEBBIE L. MOORE (913)458-3192
BLACK & VEATCH CORP
11401 LAMAR AVENUE

OVERLAND PARK, KS, 66211



To: Bruce Mitchell (000)000-0000
Florida Dept of Env'n Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL, 323992400

SHIP DATE: 29AUG03
WEIGHT: 1 LBS

Ref: 1348380030



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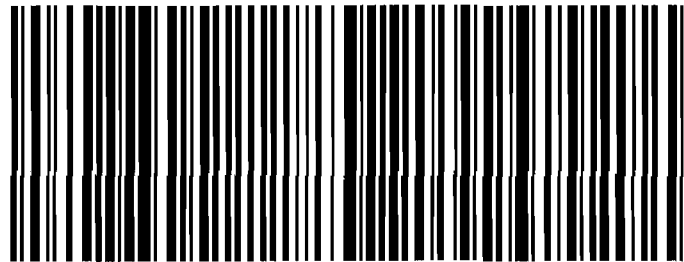
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REGULATORY & ENVIRONMENTAL SERVICES DEPARTMENT



Air and Water Quality Division

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To: Bruce Mitchell

From: Bert Gianazzo

August 25, 2003

Paul Steinbrecher, Director
Permit Assessment and Regulatory Conformance
JEA
21 West Church Street
Jacksonville, Florida 32202-3139

**RE: Cease and Desist Citation AP-02-32, AP-02-36, AP-02-37, AP-02-47, AP-02-48,
AP-03-01, AP-03-04, AP-03-07, AP-03-09, AP-03-15, and AP-03-17**

JEA

Alleged violation(s) of air quality rules.

Consent Order

Jacksonville Environmental Protection Board (JEPB) Order Adopting Consent Order

Dear Mr. Steinbrecher:

Enclosed is a fully executed copy of the Consent Order and JEPB Order for settlement of the above-referenced Citation enforcement case. The effective date of the Consent Order is August 20, 2003, establishing the following schedule, pursuant to Consent Order requirements:

1. **SO₂ Corrective Actions**

September 30, 2003:

- Install rappers on fuel silos to prevent flow stoppages, replace AQCS Diaphragm Valves, and replace gearboxes and motors (7.5 hp) with chain tension adjustability, and change out Drive

November 3, 2003:

- Complete engineering and design of start-up burners and combustion air and control systems on both units

Upon completion of start-up following the Fall 2003 outage:

- Begin 60 day compliance test run

March 15, 2004:

- Complete 60 day compliance test run

117 W. Duval St., Suite 225
Jacksonville, FL 32202
Fax: (904) 630-3638

Air Quality	(904) 630-4900
Ground Water	(904) 630-1900
Water Quality	(904) 630-3404
Hazardous Materials	(904) 630-3404



Recipient of the 2001 Governor's Sterling Award

**JEA
Consent Order with Compliance Plan
August 25, 2003
Page 2**

- 2. **CO Corrective Actions**
 March 30, 2004:
 - Procure required equipment and materials
 May 30, 2004:
 - Install required equipment and materials
 June 30, 2005:
 - Update best operational practices for cold start-up and determine if additional work and/or permit revision is needed

- 3. **Lift Station Corrective Actions**
 February 28, 2004:
 - Installation of odor controls systems at Bradley Street Lift Station
 May 30, 2004:
 - Installation of odor control systems at McMillan Street Lift Station

- 4. **Settlement Penalty / Supplemental Environmental Project (SEP)**
 February 20, 2004:
 - Deadline for payment of \$139,640 to the City of Jacksonville Environmental Protection Fund, unless a SEP is submitted and approved

Any questions regarding the Consent Order or the above-specified schedule should be directed to me at (904) 630-4900.

Very truly yours,



Dana L. Brown
Environmental Enforcement Administrator

DLB/KL/

Enclosure

c: Mr. Tracey I. Arpen, Jr., OGC
Mr. Steve Pace, AWQD
AWQD Enforcement File

s:/air/jea-northsideodors/co-cover

**BEFORE THE ENVIRONMENTAL PROTECTION BOARD
CITY OF JACKSONVILLE**

CITY OF JACKSONVILLE REGULATORY)	
AND ENVIRONMENTAL SERVICES)	
DEPARTMENT, AIR AND WATER QUALITY)	
DIVISION,)	
)	CITATIONS AP-02-32, AP-02-36, AP-
Petitioner,)	02-37, AP-02-47, AP-02-48, AP-03-01,
)	AP-03-04, AP-03-07, AP-03-09, AP-03-
vs.)	15, and AP-03-17 regarding various
)	alleged air and odor pollution violations
)	
JEA, a body politic & corporate,)	
)	
Respondent.)	

Consent Order with Compliance Plan

Pursuant to §360.410, Jacksonville Ordinance Code (JOC), and §403.121, Florida Statutes, this Consent Order with Compliance Plan is made and entered into between the City of Jacksonville, Regulatory and Environmental Services Department (RESD) and JEA, an independent agency of the City of Jacksonville and a body politic and corporate.

RESD finds and JEA neither admits nor denies the following:

1. RESD, through its Air and Water Quality Division (AWQD), administers the air quality ordinances of the City of Jacksonville and is an approved local program pursuant to Section 403.182, Florida Statutes, as authorized under Chapter 65-1474, Special Acts of 1965 and Chapter 67-1320, Laws of Florida, and pursuant to the November 20, 2001 Specific Operating Agreement with the State of Florida Department of Environmental Protection (DEP) to enforce air permitting requirements in Duval County, Florida. RESD also administers the odor ordinances of the City of Jacksonville, as authorized under Section 376.111, JOC, and Rule 1 of the Jacksonville Environmental Protection Board.
2. DEP is the administrative agency of the State of Florida with powers and duties to protect Florida's air and water resources and to administer and enforce Chapter 403, Florida Statutes, and the rules promulgated thereunder, as set forth in Chapter 62, Florida Administrative Code (FAC).
3. JEA, a body politic and corporate, is an independent agency of the Consolidated City of Jacksonville, Florida, with business offices at 21 W. Church Street, Jacksonville, Florida. JEA is a person within the meaning of Section 403.031(5), Florida Statutes, that owns and operates the Northside Generating Station located at 4377 Heckscher Drive, Jacksonville, Florida, the McMillan Street Lift Station located at 13th Street West and McMillan Street, Jacksonville, Florida, and the Bradley Road Lift Station located at 10477 Bradley Road, Jacksonville, Florida.

JEA Consent Order**Page 2**

4. Between June 18 and September 9, 2002, AWQD received six citizen's complaints concerning the lift station located at 13th Street West and McMillan Street, Jacksonville, Florida 32209. Between January 8, 2003 and February 19, 2003, AWQD received five citizen's complaints concerning the Bradley Road Lift Station located at 10477 Bradley Road, Jacksonville, Florida 32246. Upon investigation, the complaints were validated and established the respective lift stations as the sources of the objectionable odors.

5. On September 26, 2002 and February 25, 2003, AWQD issued Citations AP-02-36 and AP-03-04 to JEA for the McMillan Street and Bradley Road Lift Stations, respectively. JEA began corrective actions for the two lift stations, using a process of atomizing masking agents and hydrogen peroxide upstream as an interim measure to minimize odors. JEA is also in the process of making additional capital improvements to the McMillan Street and Bradley Road Lift Stations.

6. On July 14, 1999, DEP issued Permit Nos. 0310045-003-AC and PSD-FL-265 to JEA authorizing JEA to re-power one retired oil-fired electric generating unit and one oil-fired unit with two petroleum coke-fired circulating fluidized bed (CFB) boilers. The Northside Repowering Project (NRP) is partially funded by the U.S. Department of Energy (DOE) to demonstrate the commercial viability of utility scale CFB boilers as clean coal and alternative fuel technology.

7. JEA asserts that beginning in August 1999, construction of the boilers was undertaken by Foster-Wheeler, Inc. The original preliminary substantial completion (PSC) target date for Unit 2 was January 2, 2002, and April 4, 2002 for Unit 1. In December 2001, Foster Wheeler began the transition from construction to start up-activities; however, by September 2002, Foster-Wheeler had failed to achieve PSC for either unit. Instead, Foster-Wheeler abandoned the project September 5, 2002, leaving JEA to oversee the units, including completion of construction, repairs, maintenance, operations, and technical advisory functions that Foster-Wheeler had been performing.

8. On May 20-21, 2002, JEA conducted an initial petroleum coke fired performance test for the #2 CFB Boiler. The test report submitted on July 3, 2002 indicated that JEA exceeded allowable sulfuric acid mist (H_2SO_4) emissions rate of 1.1 lbs/hour stipulated, in that the actual H_2SO_4 emissions rate was 3.13 lbs/hour for the #2 CFB Boiler. In response to this violation, RESD issued Cease and Desist Citation AP-02-32 on September 9, 2002.

9. On June 16, 2002, JEA performed an H_2SO_4 emissions compliance retest. JEA failed to submit the report within 45 days of completion of the last sampling run on the #2 CFB Boiler. In response to this violation, RESD issued Cease and Desist Citation AP-02-47 on December 5, 2002.

10. On September 25-26, 2002, JEA conducted an initial 70% petroleum coke / 30% coal fired performance test for the #1 CFB Boiler. The test report submitted on November 12, 2002 indicated that JEA exceeded the allowable H_2SO_4 emission rate of 1.1 lbs/hour stipulated, in that the actual emission rate was 27.8 lbs/hour for the #1 CFB Boiler. In response to this violation, RESD issued Cease and Desist Citation AP-02-48 on December 17, 2002.

JEA Consent Order**Page 3**

11. On November 5-8, 2002, JEA performed an H₂SO₄ emissions compliance retest. JEA failed to submit the report within 45 days of completion of the last sampling run on the #1 CFB Boiler. In response to this violation, RESD issued Cease and Desist Citation AP-03-01 on February 14, 2003.

12. On June 29, 2002, JEA conducted an initial coal fired performance test for the #2 CFB Boiler. The test report submitted on August 13, 2002 indicated JEA exceeded the maximum lead (Pb) emission rate of 0.07 lbs/hour, in that the actual average Pb emission rate was 0.15 lbs/hour. In response to this violation, RESD issued Cease and Desist Citation AP-02-37 on September 26, 2003:

13. On December 18-19, 2002, JEA performed a quarterly particulate matter (PM) emissions compliance test. JEA failed to submit the PM test report within 45 days of completion on the #2 CFB Boiler. In response to this violation, RESD issued Cease and Desist Citation AP-03-09 on April 10, 2003.

14. On June 11, 2003, JEA submitted a CEMS report. The reported data indicated that JEA exceeded the allowable nitrogen oxide (NO_x) emission rate of 0.09 lbs/MMBtu (30-day rolling average) stipulated for the #2 CFB Boiler on 21 days. In response to these violations, RESD issued Cease and Desist Citation AP-03-15 on June 25, 2003.

15. On June 11, 2003, JEA submitted a CEMS report. The reported data indicated that JEA exceeded the allowable carbon monoxide (CO) emission rate stipulated of 350 lbs/hour (24-hour block average) for the #1 and #2 CFB Boilers. In response to these violations, RESD issued Cease and Desist Citation AP-03-17 on July 3, 2003.

16. Due to various design errors and equipment failures associated with the limestone preparation, transport, and feed systems, the air quality control systems, the boiler island, and the start-up burners and combustion air and control systems, JEA has not achieved the permitted SO₂ 24-hour block and 30-day rolling limits and the CO 24-hour block average limits on a consistent basis.

17. JEA verbally reported several SO₂ exceedances to RESD. RESD also received the Continuous Emissions Monitoring (CEM) data on March 6, 2003 showing exceedances of the SO₂ 24-hour average permit limit of 0.2 lbs/MMBtu, and the SO₂ 30-day rolling average permit limit of 0.15 lbs/MMBtu. In response to these violations, RESD issued Cease and Desist Citation AP-03-07 on April 3, 2003.

18. The discrepancies in CFB boiler operations indicate that many of the systems necessary for proper boiler operation need major efforts to successfully complete compliant start-up of both units. JEA is performing work that will require millions of dollars to address deficiencies in the following systems: limestone preparation, transportation and feed systems; the air quality control system which captures additional sulfur dioxide not captured in the boiler; the boiler island (which includes the boilers and the support equipment necessary to operate them) and numerous other ancillary systems; and, the start-up burners and combustion air and control systems. The cost of completing these systemic repairs is estimated to be in the millions of dollars.

JEA Consent Order**Page 4**

19. Representatives of JEA and RESD have met to resolve their disputes about air and odor pollution compliance issues and any alleged violations of the above-referenced permit; Chapter 62, FAC; Chapter 403, Florida Statutes; and Jacksonville ordinances and rules. The parties have agreed to enter into this Consent Order with Compliance Plan to expeditiously address compliance issues without litigation and its attendant costs, delays and risks.

Having reached a resolution of this matter, the parties agree, and it is

ORDERED:

20. Within six (6) months of execution of this Consent Order with Compliance Plan JEA shall pay the Jacksonville Environmental Protection Board \$139,640 in settlement of the matters addressed in this Consent Order with Compliance Plan. Payment shall be made by check, payable to the Environmental Protection Trust Fund. The payment shall be sent to RESD, City Hall-St. James, Suite 225, 117 W. Duval Street, Jacksonville, Florida 32202.

21. In lieu of the gravity component of the civil penalty, or any part thereof, imposed under the preceding paragraph, JEA may elect to complete a supplemental environmental project (SEP). No later than the time provided in the foregoing paragraph for paying the civil penalty, JEA shall advise RESD of its intent to undertake a supplemental project, and defer payment of the penalty until an approved SEP has been completed, or JEA's proposals have been finally rejected. Any SEP shall meet the criteria contained in the U.S. Environmental Protection Agency's Supplemental Environmental Project Guidance (May 1998). If JEA elects to undertake a SEP, it shall submit its proposal to RESD for review and approval sixty (60) days after notifying RESD of JEA's intent to undertake a SEP. If JEA's SEP proposal is rejected, JEA shall have an additional thirty (30) days to revise and resubmit a proposal. If RESD again rejects JEA's proposal, JEA shall remit the civil penalty imposed under the foregoing paragraph within thirty (30) days of receiving RESD notice of rejection. At any time before the completion of an approved SEP, JEA may request RESD to review and approve modifications to, or substitution of, the SEP; provided such request is based on JEA's good faith determination that the approved SEP is infeasible or impracticable. JEA may then have thirty (30) days after requesting the modification or substitution to submit detailed plans for RESD's review and approval. If the modification or substituted SEP is not approved within sixty (60) days after submission, the modification or substitution shall be deemed rejected and JEA shall remit the civil penalty within thirty (30) days thereafter.

22. Effective on the date this Consent Order with Compliance Plan is acknowledged and filed, JEA shall be authorized to operate Northside Repowering Units 1 and 2 in accordance with the conditions of DEP Permit Nos. 0310045-003-AC and PSD-FL-265. JEA further agrees to complete construction of, and place into service the following repairs and replacement items. If, in the course of completing these projects, it becomes known that certain specific projects are not necessary, or that corrective measures can best be accomplished in a different manner, JEA shall provide to RESD for its review and approval, a written explanation of the reason(s) for deviating from the original project list. These deviations shall not constitute a modification of this Consent Order with Compliance Plan.

JEA Consent Order**Page 5**

23. JEA agrees to implement the following systemic improvements necessary to achieve compliance with applicable requirements.

A. Limestone preparation, transport, and feed systems.

(i) The preparation system dries and sizes the limestone to be fed into the boilers. As designed, the Foster-Wheeler system cannot produce the proper size limestone or dry it sufficiently to prevent plugging of the feed system. Repairs will be made to the system to maximize its ability to dry limestone and produce acceptable size distribution, and testing will be performed to optimize the process and determine whether additional process and equipment repairs are necessary.

(ii) The transport system cannot reliably transport the prepared limestone to the silo that supplies the feed system. This process will be repaired as necessary.

(iii) The feed system, which injects limestone into the boilers to remove sulfur dioxide, is inadequate to perform properly, resulting in unreliable limestone flow. The process will be reconfigured; the system will be insulated in an attempt to eliminate condensation problems; and mechanical equipment will be replaced as needed.

B. Air quality control systems. This system consists of a semi-dry spray dryer polishing scrubber used to capture sulfur dioxide that is not eliminated through the limestone injection process in the boilers. As built it experiences frequent slurry nozzle blockages resulting in unreliable slurry feed and reduced SO₂ removal. The existing equipment will be repaired, and some malfunctioning equipment, considered critical to process stability, will be replaced.

C. Boiler island. The boiler island consists of the boilers and support equipment, much of which must be repaired or replaced. Many of these improvements require long manufacturing lead times, or equipment or processes require extensive testing to determine further refinements that may be needed.

D. Start-up burners and combustion air and control systems. This system consists of a start-up burner, primary air duct work, dampers, and associated controls. The dampers are providing too much air by-pass to the burner during start-up, thereby cooling the flame and extending the duration of start-up and resultant excess emissions. An engineering evaluation and redesign of the equipment is required to optimize this system and reduce start-up duration.

The repairs and replacements contemplated in this Consent Order with Compliance Plan or addressed in paragraphs A, B, and C above do not constitute a modification under 40 CFR 52.21 or Rule Chapters 62-210 and 62-212, FAC, and do not require an air construction permit; this Consent Order with Compliance Plan constitutes approval to undertake this work.

The following table is a list of the significant milestones that will be met to identify, install, test, and confirm compliant operational capability of Units 1 and 2.

JEA Consent Order**Page 6**

WTS Number	WTS Title	WTS Scope	Deadline
2-01	Replace transport piping	Replace horizontal run of limestone transport piping to unit one per sizing by J&J.	Complete
2-02	Replace transport blowers	Replace complete transport blower skids with re-sized skids. Sizing to be recommended by J&J, skid design by Delta-Ducon/Gardner Denver/UCC.	Complete
4-05	Fuel silo (install rappers)	Install rappers on fuel silos to prevent flow stoppages	09/30/2003
7-34	Replace AQCS Diaphragm Valves	Replace AQCS Diaphragm Valves	09/30/2003
13-05	Rotary valve motor gearbox change	Replace gearboxes and motors (7.5 hp) with chain tension adjustability. Drive will have to be changed out also.	09/30/2003
	Begin 60 day compliance test run		Upon completion of start-up following the Fall 2003 outage
	Complete 60 day compliance test run		03/15/2004
	Engineering and design of start-up burners and combustion air and control systems	Complete engineering and design of start-up burners and combustion air and control systems on both units.	11/03/03
		Procure required equipment and materials	03/30/04
		Install required equipment and materials	05/30/04
		Update best operational practices for cold start-up and determine if additional work and/or permit revision is needed	06/30/05

JEA shall take appropriate measures to minimize excess SO₂ and CO emissions during the repair and replacement activities.

24. Upon completion of the projects in paragraph 23 above, JEA shall demonstrate compliance with the SO₂ 24-hour average and 30-day rolling average emission limits, as defined in DEP permit no. 0310045-003-AC, specific conditions 14(a), 14(c), and 31(a) for a period of not less than 60 consecutive days.

JEA Consent Order

Page 7

25. Installation of odor control systems shall be complete by May 30, 2004 at the McMillan Street Lift Station, and by February 28, 2004 at the Bradley Road Lift Station. Additionally, the Bradley Road Lift Station shall be rebuilt by the end of August 2003. JEA shall take appropriate measures to minimize odors during the installation of the odor control systems at the McMillan Street and Bradley Road Lift Stations and the rebuilding of the Bradley Road Lift Station.

26. All other violations addressed by this Consent Order with Compliance Plan have been corrected.

27. This Consent Order with Compliance Plan fully resolves all issues raised in the Cease and Desist Citations regarding the matters addressed herein. RESD reserves the right to take appropriate enforcement action against JEA for any future violation of the Department's rules or permit conditions unrelated to this Consent Order with Compliance Plan or the alleged violations. JEA reserves its right to contest any such enforcement action in accordance with applicable law.

28. The terms and conditions set forth in this Consent Order with Compliance Plan may be enforced in a court of competent jurisdiction pursuant to Sections 120.59 and 403.121, Florida Statutes. JEA's failure to comply with the terms of this Consent Order with Compliance Plan will constitute a violation of Section 403.161(1)(b), Florida Statutes.

29. A violation of the terms of this Consent Order with Compliance Plan may subject JEA to judicial imposition of civil penalties of up to \$10,000 per violation per day. In the event that RESD initiates such an action pursuant to this paragraph, JEA reserves all of its rights and defenses to challenge or respond to such legal action as appropriate.

30. In consideration of the complete and timely performance by JEA of the obligations agreed to in this Consent Order with Compliance Plan, RESD waives any right to seek judicial imposition of additional penalties. JEA waives its right to an administrative hearing pursuant to Sections 120.569 and 120.57(1), Florida Statutes, regarding the terms of this Consent Order with Compliance Plan. JEA also waives its right to appeal the terms of this Consent Order with Compliance Plan.

31. The execution of this Consent Order with Compliance Plan does not obligate RESD to issue a permit for any facility that does not comply with all applicable statutes, rules and regulations. Furthermore, the execution of this Consent Order with Compliance Plan does not constitute a waiver by JEA of its right to request a formal administrative hearing or to take all appropriate appeals necessary to challenge DEP's denial of any permit or imposition of any specific permit conditions contained in any permits issued by DEP.

32. No modification of the terms of this Consent Order with Compliance Plan will become effective until it is reduced to writing and approved by all parties. RESD and the Jacksonville Environmental Protection Board will not unreasonably withhold their approval of modifications to this Consent Order with Compliance Plan requested by JEA.

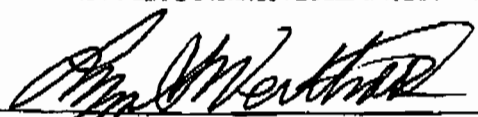
33. If any event occurs that causes delay or the reasonable likelihood of delay in complying with the requirements of this Consent Order with Compliance Plan, JEA shall have the burden of proving by a preponderance of the evidence that the delay was or will be caused by circumstances beyond its reasonable control and could not have been or cannot be overcome by JEA's due diligence. Economic circumstances shall not be considered circumstances beyond JEA's control nor shall the failure of a contractor, subcontractor, materialman or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines be a cause beyond JEA's control, unless the cause of the contractor's late performance was also beyond the contractor's control or is due, in the exercise of JEA's best professional judgment, to the novelty and the magnitude of the Northside Repowering Project's CFBs and associated systems. Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, JEA shall notify RESD orally within 24 hours or by the next working day and shall, within seven calendar days of oral notification to RESD, notify RESD in writing of the anticipated length and cause of the delay, the measures taken or to be taken to prevent or minimize the delay and the timetable by which JEA intends to implement these measures. If the parties can agree that the delay or anticipated delay has been or will be caused by circumstances beyond JEA's reasonable control, the time for performance hereunder shall be extended for a period equal to the agreed delay resulting from such circumstances. Such agreement shall adopt all reasonable measures necessary to avoid or minimize delay. JEA's failure to comply with the notice requirements of this paragraph in a timely manner shall constitute a waiver of its right to request an extension of time to comply with the requirements of the Consent Order with Compliance Plan.

34. The provisions of this Consent Order with Compliance Plan shall apply to and be binding upon the parties, their officers, directors, agents, servants, employees, successors, and assigns and all persons, firms and corporations acting under, through or for them and upon those persons, firms, and corporations in active concert or participation with them.

35. Entry of this Consent Order with Compliance Plan does not relieve JEA of the need to comply with applicable federal, state or local laws, regulations or ordinances; however, it does constitute a complete and full resolution of the violations alleged above.

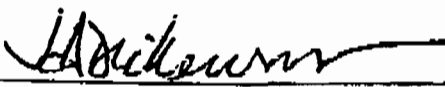
CITY OF JACKSONVILLE
REGULATORY AND ENVIRONMENTAL SERVICES

8/5/03
Date


Lynn Westbrook, Interim Chief Operating Officer

JEA

7/31/03
Date

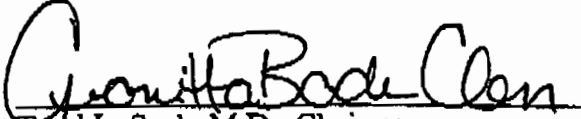

James Dickenson, Chief Operating Officer

JEA Consent Order

Page 9

ORDER

I hereby certify that the foregoing document was adopted by order of the Environmental Protection Board of the City of Jacksonville this 20th day of August, 2003.



for Todd L. Sack, M.D., Chairman
Environmental Protection Board



MEMORANDUM

July 29, 2003

TO : Bruce Mitchell, FDEP

FROM: Wayne Walker, AWQD

RE : Compliance Status
JEA Northside
(2) CFB Boilers and Materials Handling Emission Units (EU)
Permit Numbers: 031-0045-007-AC; PSD-FL-265

Pursuant to your conversation with Mr. Richard Robinson, P.E., of our agency on or about July 22, 2003, the following information is provided:

1. JEA Northside EUs governed by the above captioned permits have demonstrated compliance with applicable emission limits, as measured by EPA Reference Method (RM) procedures, except for outstanding testing as noted below.
2. JEA Northside has entered into a Consent Order/Compliance Plan with AWQD as a result of problems with meeting the SO₂ and CO 24-hr. and 30-day rolling average emission limits imposed on the two CFB boilers. Copies of JEA's task lists for addressing and correcting the issues contributing the exceedences are being provided to FDEP. The Consent Order has not yet been approved by Duval County's Env. Protection Board. A copy will be forwarded to FDEP when final approval is granted.
3. Since our July 2nd meeting at JEA Northside, no RM22 VE test has been scheduled for the Limestone Dryer Building.
4. No PM testing has been scheduled for EU 034, the Limestone Crusher Conveyor Transfer baghouse vents, which we observed high up on the west side of the Dryer Building in a nearly inaccessible location. It is assumed that JEA continues to contend PM testing of this EU is impossible.
5. PM testing of the Limestone Feed Silo Bin Vents (EU 035) was originally scheduled for the week of July 7th, but that testing has been pushed back to mid/late August, due to a baghouse media replacement project.
6. VE testing of the Plant Transfer Building (EU 028o) was scheduled to be conducted during the week of July 7th.

Please let me know if you need anything further. I can be reached at 904-630-1212 ext. 3164, or at wlw@coj.net.

No further information follows.

WTS Number	WTS Title	WTS Scope	
2-01	Replace transport piping	Replace horizontal run of limestone transport piping to unit one per sizing by J&J .	
2-02	Replace transport blowers	Replace complete transport blower skids with re-sized skids. Sizing to be recommended by J&J, skid design by Delta-Ducon/Gardner Denver/UCC.	
2-10	Insulate Day Bin and Hot PA Line.	Insulate Day Bin and Hot PA Line.	
4-05	Fuel silo (install rappers)	Install rappers on fuel silos to prevent flow stoppages.	
7-07	Final filter	Install redundant final filter and upgrade as required valves and valve controls around final filter and evaluate programming of final filter operation. Evaluate impact on boiler operation of final flush sequence.	
7-34	Replace AQCS Diaphragm Valves	Replace AQCS Diaphragm Valves	
13-05	Rotary valve motor gearbox change	Replace gearboxes and motors (7.5 hp) with chain tension adjustability. Drive will have to be changed out also. VFD's, gearbox (\$5k), motor all located in local panel May be able to move these over to limestone and save cost on 1-8.	

WTS Number	WTS Title	WTS Scope	
1-01	Piping	Repiping of vent piping from vent hoppers to bin vents, including addition of hot primary air to prevent system from operating below saturation & condensing moisture which causes agglomeration of limestone dust & pluggage.	
1-02	Insulation	Insulate vent riser piping and bin vents and hot PA piping to maintain temperature and prevent pluggage due to condensation and for personnel protection.	
1-03	Rotary valve clean-out	Install 8" clean-out port above limestone feed rotary valves, install air taps below silo isolation gates to facilitate closing gate.	
1-04	Remove existing bag-catcher in bin vent	Remove remains of existing bag catcher for limestone silo bin vent.	
1-05	Bag-catcher in bin vent	Install replacement bag catcher for limestone silo bin vent.	
1-06	Balancing feed rate between ports	Balance limestone feed systems to provide even distribution to all compartments of boiler. May include installation of splitter boxes or piping changes.	
1-07	Rotary valve packing	Repack rotary valve packing to decrease dust emissions and reduce torque.	
1-08	Rotary valve gearbox/motor	Replace rotary valve gearboxes and motors.	
1-09	Additional Instruments for limestone feed vent system.	Additional Instruments for limestone feed vent system.	

WTS Number	WTS Title	WTS Scope	
2-01	Replace transport piping	Replace horizontal run of limestone transport piping to unit one.	
2-02	Replace transport blowers	Replace transport blower skids with re-sized skids.	
2-04	Bin vent filter fan	If necessary, install bin vent filter fan to reduce delta-P across silo bin vent filters.	
2-06	Day bin level indication	Install limestone day bin level detection	
2-10	Insulate Day Bin and Hot PA Line.	Insulate Day Bin and Hot PA Line.	
3-01	Cut off landfill gas to LS prep	Install landfill gas piping to burn gas in unit one, two & three boilers without going to limestone prep.	
3-03	Baghouse: (diffusers)	Repair baghouse to diffuse inlet air stream to reduce local high velocities and associated bag wear.	
3-05	Dryer loop controls evaluation with damper.	Replace tempering air damper controls and other vent loop controls including baghouse inlet thermocouple to allow optimization of limestone drying system.	
3-10	Fix rod mill cracking, liner & bolt failure problems	Repair as needed to reliably produce a dry product with proper size distr	
3-11	Chute work (ceramic, uhmw-ultra high molecular weight polymer or plastic, pluggage concerns)	Chute work to reduce pluggages and improve flow distribution to screeners. Includes installation of UHMW or stainless steel liners.	
3-12	Switch gear room environmental controls (dust & condensation)	Install wall unit air conditioners provided from plant surplus.	
3-13	Air compressor & blower enclosure	Install concrete block wall separating blowers and air compressors from limestone prep eq ground floor. Scope to include design construction and HVAC and lighting & monorail (10 ton).	

WTS Number	WTS Title	WTS Scope	
3-15	Method to return material to the system from pocket conveyor (spillage, carry back)	Install vacuum cleanup system allowing vacuumed matl to be returned to product stream.	
3-17	Flow aid devices (air cannons, vibrators, etc)	Install flow aid devices such as air cannons and vibrators as req'd.	
3-18	Baghouse inlet TC's (problem with excessive temp on bags)	Install TC's at baghouse inlet and terminate on PLC to protect and control bag temps. Overtemp on bags is causing premature failures.	
3-20	Evaluation of pre-prepared Limestone product	Evaluate limestone product prepared by Oro Avanti for elimination of limestone prep facility and operation on 100% coke.	
3-21	Bag Replacement	Limestone Preparation Baghouse Bag Replacement	
4-01			
4-02			
4-04	Fuel silo (install plate/hammer blocks)	Install hammer blocks on fuel silos to prevent hammer damage during flow stoppages.	
4-05	Fuel silo (install rappers)	Install rappers on fuel silos to prevent flow stoppages.	

WTS Number	WTS Title	WTS Scope	
5-01	Fix/develop air curves (fuel/air mix)	Fix/develop air curves (fuel/air mix)	
5-02	Automate/develop startup burner air curves (fuel/air)	Automate/develop startup burner air curves (fuel/air)	
5-03	SO2 control automation	Provide SO2 control loops to provide automated SO2 control from boiler	
5-04	Automate boiler master to plant master (ABB)		
5-05	EX 2000/Mark VI communications (GE)	Equipment environment needs to be brought up to spec. May add an enclosure and A/C for EX2000 cabinets.	
5-06	Tune runbacks - done during plant conditions in upset (off normal) or as allowed by dispatch	Tune runbacks - done during plant conditions in upset (off normal) or as allowed by dispatch	
5-07			
5-09	Add motor amps indication and graphics	Add wiring to DCS I/O and DCS programming to include graphics to accommodate motor amp indications from all major 4160 V and above motors.	

WTS Number	WTS Title	WTS Scope	
6-01	Physical pressure tap configuration, bed & Intrex and pressure tap purge air	Instrument taps - add a sensing tube and purge air per PyroPower standard design.	
6-02	- Maintenance program for pressure taps, need training (PM's)	Develop a procedure and perform OJT for PM's and maintenance of boiler pressure taps and purge air system.	
6-03	Intrex TC's brought into DCS	Weir overflow TC's and other TC's need to be brought back into DCS. Use existing tray, some conduit may be needed, DCS programming required.	
7-01	Nozzle changeout & associated re-tuning & re-balancing (air side pluggage is current major problem)	Install 7 mm nozzles and rebalance slurry and air pressures.	
7-03	Baghouse management program	Develop and implement OJT program for operation and maintenance of baghouse.	

WTS Number	WTS Title	WTS Scope
7-04	Fly ash system programming	Reprogram PLC for additional flexibility in selection or deselection of specific hoppers. Also configure programming to allow control of individual components.
7-05	Slurry hdr isol valves	Install manual isolation valves ahead of automatic valves on slurry ring header.
7-06	DCS remote nozzle controls	DCS re-program and graphics to facilitate remote start and stop of individual nozzles.
7-07	Final filter	Install redundant final filter and upgrade as required valves and valve controls around final filter and evaluate programming of final filter operation.
7-08	SDA penthouse drain	Re-route present SDA drain piping to eliminate horizontal runs.
7-09	SDA hoist replacement	Replace existing SDA hoist.
7-10	Delumper replacement	Delumper replacement
7-11	Recycle bin rotary vlv	Chute work and purge air re-work to fly ash surge bin outlet rotary valves.
7-12	Recycle mix tank vent	Install vent system to remove steam from recycle mix tank, vent back to baghouse inlet.

WTS Number	WTS Title	WTS Scope	
7-13	Recycle mix tank pump	Recycle mix tank pump system -- eliminate in-tank strainer pluggage and pump suction pluggage by large solids. Includes: strainer removal, external strainer installation and possible changeout to open impeller	
7-14	Recycle slurry screener replacement	Research, test and install an acceptable recycle slurry screener	
7-15	Recycle slurry tank cleanout door needs to be tombstone instead of round hole.	Install tombstone door to replace existing round door to facilitate flushing of the tank.	
7-16	Recycle slurry tank mixing process repair	Repair recycle slurry mixing system	
7-20	Air compressor cooling controls (reliability)	Install UPS power to glycol system control skid and PLC.	
7-21	Check vlvs ahead of air receiver on fabric filter so receiver doesn't bleed down on loss of instrument air.	Install check valves ahead of baghouse outlet damper instrument air receiver to prevent receiver bleed down on loss of air.	
7-22	Lime silo feed line	Complete installation of hardened fittings on lime silo fill lines.	

WTS Number	WTS Title	WTS Scope	
7-23	Baghouse sump	Add agitation to sump.	
7-24	Baghouse outlet damper limit switch changes	Installing limit switch landing pad adjustment.	
7-25	Bridge Controller for DCS	Bridge Controller for DCS	
7-26	Nozzle Remote Purge	Nozzle Remote Purge	
7-27	Air Separator Water Drain	Air Separator Water Drain	
7-28	Mag Flow Meter Pipe	Mag Flow Meter Pipe Repair	
7-29	Surge Tank Vent to Drain	Surge Tank Vent to Drain	
7-30	Lime Loop Head Tank	Lime Loop Head Tank	
7-31	Lime Loop Piping	Lime Loop Piping repairs	
7-32	Slurry Pump Mechanical Seal Installation	Slurry Pump Mechanical Seal Installation	
7-33	Slurry Blowdown Valve	Slurry Blowdown Valve	
7-34	Replace AQCS Diaphragm Valves	Replace AQCS Diaphragm Valves	
7-35	Nozzle Guide Replacement	Nozzle Guide Replacement	

WTS Number	WTS Title	WTS Scope	
8-01	Seal pot blower base: phase one for unit one	Change seal pot blower bases and skids to include grouting, to provide a more vibration resistant and stiffer base.	
8-06	Intrex Tube Bundle Handcuffs	Intrex Tube Bundle Handcuffs	
9-04	Harp tube insulation	Develop a better method for insulating harp tubes in the windbox and install/apply.	
9-05	Hot PA ductwork support	PA duct support replacement contingent on study.	
9-06	Damper PA and SA	Replace grid damper. Replace upper and lower front and rear SA dampers.	
10-02	Drop chute isolation valve purge air	Install purge air from cold PA to bonnets of front and rear wall fuel feed isolation gates and rear wall drop chute gates.	
10-03	Replace rear wall drag chain slide gates	Replace rear wall gate.	
10-04	Rear wall drop chute plugged chute indication	Replace chute instrumentation.	
10-05	Fuel Feed Chute Seal Welding	Fuel Feed Chute Seal Welding	
11-02	Air flow	Change burner configuration to prevent burner resonance induced vibration. Change damper drives to eliminate sticking and prevent operation with excess air. Repair or replace gas line, gussets, slip ring at burner head straightening.	
11-03	Replace PA booster blowers bearings and shafts	Replace PA burner booster blowers.	
11-04	Burner barrel repair and Refractory	Repair refractory system (tile) in burner throats. Replace carburized barrel steel on unit two burners (A&C).	
11-05	Burner control and scanner	Repair burner flame scanner system and pressure switch, low fire pressure switch, position switches, gas flow meters.	
11-06	Additional Startup Burner Instrumentation	Additional Startup Burner Instrumentation	

WTS Number	WTS Title	WTS Scope	
12-02	Replace critical fabric joints	Replacement of load-critical fabric joints.	
12-05	Repair replace PA to grid joints	Repair or replace pillows and shields installed on unit two.	
12-06	Stripper cooler transfer line purge air	Install isolation valves and purge air connections to stripper cooler transfer line fluidization nozzles to allow on line cleaning of individual nozzles. Install air cannon on each air header.	
12-07	Stripper cooler inlet expansion joint cover replacement	Unit two has already been inspected and addressed.	
12-08	Stripper cooler cold PA cell 2 replacement	Replace and repair expansion joints to eliminate resonance failure.	
12-09	Front wall secondary air exp jnt	Replace failed double metal bellows expansion joints unit one front wall SA air.	
12-10	Intrex inlet and outlet joints refractory shielding pillow	Remove refractory and expansion joint inner liner. Replace pillows, seal and liner. Replace anchors and reinstall refractory.	

WTS Number	WTS Title	WTS Scope	
13-01	Refractory replacement	Replace damaged stripper cooler refractory.	
13-02	Emergency spray water nozzle purge air	Install purge air header and roots blower for stripper cooler spray water nozzle continuous cooling and purge air.	
13-03	Baffle wall	Passage between cell walls -- increase size vertically.	
13-04	Air taps addition	Connect plant air to 3/4" valve below stripper cooler rotary valve isolation gate Add cold PA purge air to isolation gate bonnet.	
13-05	Rotary valve motor gearbox change	Replace gearboxes, motors (7.5 hp), and drive with chain tension adjustability.	
13-08	Automated inlet expansion joint drain	Install FW provided automatic expansion joint drain valves and automate valves through DCS.	
13-09	Dropping Rotary valves & installing clean-outs & air cannon connection (in prog)	Change dropleg to stripper cooler outlet rotary valves to install cleanout port and fluidizing air taps and future air cannon connection.	

WTS Number	WTS Title	WTS Scope	
13-10	Cold PA air piping to stripper coolers (N1 in prog)	Complete Installation of cold PA piping to stripper coolers includes addition of isolation valves to new piping and to existing cold PA to stripper cooler piping.	
14-01	Bonnet and seat purge air - flyash segregation valve (valve hangups)	Install instrument air regulator and purge air to all fly ash crossover valve seats and bonnets. Disassemble and thoroughly clean all valve seating areas and bonnets.	
14-04	Bed ash blower - Phase 1 base installation	Repair bed ash blower bases to eliminate vibration related blower failures.	
14-05	Ash silo roof leaks	Bed ash silo roof leaks required to bin vent curbs.	
14-07	Bed ash blower - Phase 2 base installation	Repair bed ash blower bases to eliminate vibration related blower failures.	

WTS Number	WTS Title	WTS Scope	
15-01	Critical Heat tracing additions	Add heat tracing to critical instruments on an emergency basis. Install fully automated, industry standard heat tracing system.	
15-04	Critical piping growth hanger/support	Add supports because Calcium Silicate inserts have failed, allowing pipe to move off of support, further damaging CaSi inserts.	
15-06	Cyclone transfer lines support	Repair cyclone transfer line and drain line support systems	
15-09	FW heater relief valves (bop)	O&M has covered this expense with upgraded reseatable relief valves.	
15-10	HP/IP bypass valve flush hydraulic unit flush	Perform actuator hydraulic system flush for HP/IP flush valve. Includes hydraulics-capable CCI rep to develop PM and maintenance program.	
15-11	Reheat stop valve rebuild (bop)	Premature failure of disk spring actuator necessitates replacement of all 3 remaining disk paks.	

WTS Number	WTS Title	WTS Scope	
16-01	Boiler elevators	Rent 2 elevators	
16-02	Complete PA SA ID fan access guardrails	Handrails, stairs, toeplates to complete access platforms.	

WTS Number	WTS Title	WTS Scope	
3001	Boiler Instrumentation	Boiler Instrumentation	
3002	AQCS Instrumentation	AQCS Instrumentation	

7/29/03

Wayne,

I'm just coming off of vacation and have opened up your e-mail and printed the various documents. I will review them and call you if I need some discussion to understand an item. Thanks for the information and take care.

Bruce.

-----Original Message-----

From: Wayne Walker [mailto:WLW@coj.net]

Sent: Thursday, July 24, 2003 3:25 PM

To: Mitchell, Bruce

Subject: JEA Northside Compliance Status

Bruce,

Please see the attached info.

Wayne Walker



BLACK & VEATCH

Bob Holmes
Air Quality Scientist

Black & Veatch Corporation
11401 Lamar Ave, Overland Park, KS 66211 USA
Tel: (913) 458-2126 . Fax: (913) 458-2934 . holmesar@bv.com

building a **world** of difference™



BLACK & VEATCH

Corporation

Timothy M. Hillman
Air Quality Scientist, Environmental Advisory Services

11401 Lamar Avenue
Overland Park
Kansas 66211 USA

Tel. (913) 458-7928
Fax. (913) 458-2934
hillmantm@bv.com

the imagine • build company™

7-2-03

0 EU 28 Coal Unloading digitals - dry pt. type

Round
spindlers
3 A 5%
3 B 10%

4 x Blids

all conveyors are enclosed except at the dock (belt conveyor #1)

TB 5 to Dams A thru Dam B - EUs Dams any stack height

[stacker/reclaimers]

inside the Dams

should be in the domes

petcoke or coal in both the domes

emission pts.

water-sprays

ventilation x 6 fans

dust suppressants

for the digitals

(PSD -> Transfer towers)

TB 6 -> crusher Blid

Plant Transfer Blid
to towers x 6

suppression & dust collection

by hoover

limestone - processing & storage reclaim

TB 5 -> stockpile

EU 28 D

L-2 & L-3 - reclaimers - no dust suppression

↓
storage blid.

TB-5

lowering well - telescopic chute

has 1 dust collector

hoppers & reclaimers adjacent quantities

bucket feed or front-end loader

Final silos

EU 31: silos - 1 Dust collector / 5 silos

transfer pts.

② Limestone Pkg Bldg

EU 32 - never constructed

3 trains coming in - 3 x baghouses exhaust to the side
transfer pts
screens

EU 33 limestone dryers

EU 34 " " comp

unable to do testy -

no - large bin
(not built)

↓
goes directly
into the grass

method 22 on limestone pkg bldg.



BLACK & VEATCH

Owner _____ Computed By _____
 Plant _____ Unit _____ Date _____ 20 _____
 Project No. _____ File No. _____ Verified By _____
 Title _____ Date _____ 20 _____
 Page _____ of _____

Company/Organization	Name	Phone
Black & Veatch	Tim Hillman	913 458 7928
Black & Veatch	Bob Holmes	913-458-2126
FDEP/DARM/BAR/TITLE II	Bounce Mitchell	850/413-9198
JEA NGS	PAUL R. FORRESTER	904-665-4943
JEA NGS	David Morse	904-665-5501
XXXXXXXXXXXX		
JEA NGS	BILL GOODRICH	904-665-6609
JEA NGS	ROGER EMERY	904-665-8706
RES/D	Wayne Walker	904-630-1212
RES/AWD	RICHARD ROBINSON	904-630-4900
JEA	Bert Giannazza	904-665-6247

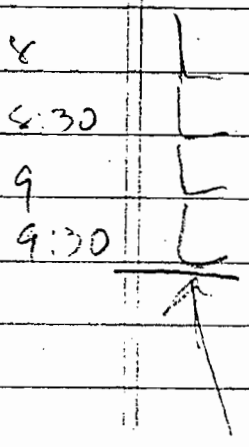
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PGN-172B

Installation of Baggers	003-AC	Units 1 & 2 Repowering Project	Issued	7-14-99	10-21-03
	004-AC			4-20-00	10-30-01
revision of SC5 to allow EPA Method 7 or 7E	005-AC			7-17-00	7-17-05
	006-AC			4-4-01	4-4-06
	007-AC			5-25-01	5-25-06

changes to the design of the ash handling sys.

SFR PP #1 | 016
 #2 | 017



026
027

→ 042

1/10/99 Dg 55 - 002

3/12/99 Issued/checked

042 NGS - Pebble Lim Silo

003
7-14-99

Issued/checked

- 41 - Fly Ash Truck Loadout Systems
- 40 - Bed Ash Truck Loadout Systems
- 39 Fly & Bed Ash Silo Hydrators
- 38 - Bed Ash Transfer & Storage Systems
- 37 - Fly Ash " " "
- 36 - Fly Ash Waste Bins
- 35 Limestone Feed Silos
- 34 Limestone Crusher Conveyor Transfers
- 33 Limestone Dryers/Mills
- 32 Limestone Receiving Bins
- 031 Boiler Fuel Silos
- 29 Crusher House
- 28 Materials Handling & Storage Operations
- 27 Circulating Fluidized Bed Boilers No. 1
- 26 " " No. 2

007
44-50
Ash Bins

Mitchell, Bruce

From: Gianazza, N. Bert [GianNB@jea.com]
Sent: Thursday, June 19, 2003 2:03 PM
To: Mitchell, Bruce
Subject: NGS CT Biennial stack testing

Bruce,

The permit renewal application for Northside is being sent out from the B&V offices in Kansas City today by overnight delivery, and I didn't put anything in the application about the CT testing. The testing is required to be performed by 9/30/03, but we expect to have it done by the end of July. I'll email you when we have submitted the stack test results.

Let me know if you need me to send you a letter on this as a supplement to the application or what have you.

Tx, B.

Mitchell, Bruce

From: Gianazza, N. Bert [GianNB@jea.com]
Sent: Thursday, June 19, 2003 3:45 PM
To: Mitchell, Bruce; Holtom, Jonathan
Subject: Directions to NGS for July 2nd.

Coming from Tallahassee to Jacksonville on I-10.

Exit onto I-295 North. After 10 miles or so, you'll see signs for I-95.

Continue past I-95. At about this time I-295 will turn into 9A.

Go past Main Street and Alta exits (there is one or two other exits as well)
(you'll start seeing the very distinguished and good-looking NGS and SJRPP sky-lines on your left)

About 7 or 8 miles after passing I-95, you'll see signs for the Heckscher Drive exit which is also the Blount Island exit.

You'll have to exit to your right and go (take the car) to the light. Turn left onto Heckscher Drive (towards Blount Island).

Go through the two lights (wait until they're green).

Less than a half mile down on your left, you'll see the Northside station entrance. Take it.

Please call me around 10:00 and/or when you're approaching the plant, and I'll meet you at the gate.
(I'll be at the plant around 9:30 or so.)

Take care, Bert

My cell phone number is **904-502-8980**

My pager number is **904-442-6225** (press "1", your number, and "#". Or you can listen to the boring instructions.)

22 West Church Street
Jacksonville, Florida 32202-8139

RECEIVED

JUN 09 2003

BUREAU OF AIR REGULATION

May 7, 2003



Mr. James L. Manning, P.E.
Division Chief
Air and Water Quality Division
Regulatory and Environmental Services Dept.
117 West Duval Street, Suite 225
Jacksonville, Florida 32202-4111

Dear Mr. Manning:

RE: Northside Generating Station (NGS) Units 1 and 2
Construction Permit No. 0310045-003-AC (PSD-FL-265)

Please be advised that no trucking of coal from SJRPP to NGS was performed since the coal shipment to NGS was received in time.

JEA appreciates RESD's expeditious handling of our request to allow burning the SJRPP coal with added chemical dust suppressant in NGS Units 1 and 2 on a one-time emergency basis.

To avoid this situation in the future, the use of chemical dust suppressants will be added to the NGS Title V permit.

If you have any questions with regard to this matter, please call me at 665-6247.

Sincerely,

A handwritten signature in black ink, appearing to read 'N. Bert Gianazza', is written over a horizontal line.

N. Bert Gianazza, P.E.
Environmental Services

cc: Steve Pace, P.E., RESD
Richard Robinson, P.E., RESD



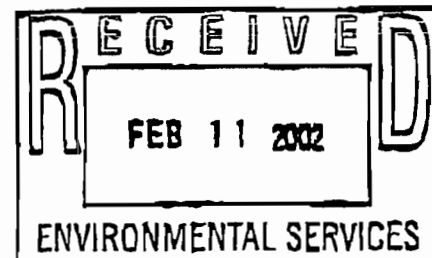
Jeb Bush
Governor

Department of Environmental Protection

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

David B. Sruhs
Secretary

February 6, 2002



CERTIFIED MAIL - Return Receipt Requested

Mr. Walter P. Bussells
Managing Director & CEO
JEA
21 West Church Street, Tower 8
Jacksonville, Florida 32202-3139

Re: Alternative Solid Fuel Handling Scenario
JEA Northside Generating Station/St. Johns River Power Park
0310045-009-AC, PSD-FL-265

Dear Mr. Bussells:

The Department has evaluated the January 7, 2002 submittal regarding the above referenced proposed alternative solid fuel handling scenario. The scenario would provide JEA with a limited capability to use dump trucks to transport solid fuel (coal and petroleum coke) between the respective solid fuel handling facilities at the Northside Generating Station (NGS) and the adjacent St. Johns River Power Park (SJRPP). The scenario would be used in the event of equipment failure, fuel delivery disruption and emergencies. It would also be used when there is a disproportionate fuel inventory or to facilitate performance testing.

The adjacent plants comprise a single "Major Source of Air Pollution" or "Title V Source" pursuant to Rule 62-210.200, Florida Administrative Code (F.A.C.), Definitions. The combined facility received its initial Title V operation permit on October 18, 1998, and became effective on January 1, 1999.

Since the projected PM and PM₁₀ emissions increases are much less than the significant emissions rates of 25 and 15 TPY contained in Table 212.400-2, F.A.C., the proposal is not subject to PSD new source review pursuant to Rule 62-212.400(5), F.A.C. The project is not part of a phased project subject to PSD review pursuant to Rule 62-212.400(6)(b), F.A.C. There are no specific emission limiting standards pursuant to Rule 62-204.800 and Chapter 62-296, F.A.C.

The Department has determined that the project is conditionally exempt from its air permitting requirements. This determination is based on the belief that JEA has provided reasonable assurance that any additional air pollutants caused by the proposed scenario will not be in significant quantities to contribute to air pollution problems in the state pursuant to Rule 62-4.040(1)(b), F.A.C.

The conditions of this exemption are:

- A. JEA shall perform the following fugitive dust control measures to reduce particulate fugitive emissions associated with the proposed alternative solid fuel transfer scenario:
1. Water application to unpaved portions of the proposed solid fuel truck delivery route as necessary to control fugitive dust emissions.
 2. Road surface cleaning to paved portions of the proposed solid fuel truck delivery route as necessary to control fugitive dust emissions.

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Mr. Walter P. Bussells
 February 6, 2002
 Page 2 of 3

3. Water application to the affected portion of the solid fuel storage pile at SJRPP prior to solid fuel truck loading operations with the front-end loader.
 - B. If the scope or scale of the scenario changes such that the potential emissions of PM or PM₁₀ become significant, or if the scenario becomes routine, then JEA shall notify the Department's Bureau of Air Regulation and request the exemption be amended. The Department reserves the right to require an air permit for this activity based on any changes or a new request.
 - C. Upon the next opening of the facility's Title V operation permit, this alternative solid fuel handling scenario will be identified/designated as an "insignificant" emissions unit/activity and placed in Appendix I-I, Insignificant Emissions Units/Activities.
4. This conditional exemption will take effect 21 days from the clerking date unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, Florida Statutes (F.S.). The procedures for petitioning for a hearing are set forth below.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact; if there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the request for conditional exemption have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

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

cc: Roger Emery
Bill Goodrich
Mark Calenhead
Don Cheatham
~~Mark Bennett~~
Bert Granazza
Rusty Logan
Jacob Bennett

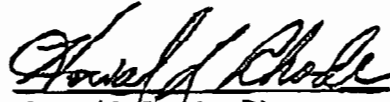
Orig → File

Mr. Walter P. Bussells
February 6, 2002
Page 3 of 3

A copy of the conditional exemption and accompanying materials related to the proposed agency action are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Division of Air Resources Management, Suite 23, Magnolia Courtyard, 111 South Magnolia Drive, Tallahassee, Florida 32301.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(850)488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF CONDITIONAL EXEMPTION and all copies were sent by certified mail* or U.S. mail before the close of business on 2/7/02 to the person(s) listed:

- Walter P. Bussells, Managing Director & CEO, JEA*
- Bert Gianazza, P.E., JEA
- Jim Manning, P.E., Jacksonville RESD
- Chris Kirts, DEP SWD
- Buck Owen, DEP PPSO

Clerk Stamp

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

Victoria Simon February 7, 2002
(Clerk) (Date)

HLR/CHR/gpd

Mitchell, Bruce

From: Gianazza, N. Bert [GianNB@jea.com]
Sent: Thursday, May 15, 2003 3:20 PM
To: Arif, Syed
Cc: Wayne Tutt; Wayne Walker; Dana Brown
Subject: Repair work being performed on Northside Units 1 and 2

Syed,

Per your request, please find attached a list of projects that JEA has undertaken or plans to undertake to bring the units up to the necessary levels of reliability and environmental performance. As you may know, startup activities began for Unit 2 (the first unit to be constructed) in December of 2001, and March of 2002 for Unit 1. By September of 2002 (almost a year later), the contractor prematurely left the job site without demonstrating the performance necessary to achieve the contractual milestones of preliminary substantial completion, reliability testing, or substantial completion. This resulted in JEA assuming control of the units with operational problems such as malfunctioning equipment and other defects in the installation of the units resulting in frequent forced outages and emissions exceedances. Since that time, JEA has worked to correct those problems and is continuing to make repairs and replacements to the components necessary for the units to operate reliably and in compliance with permit conditions.

No changes are being made that enhance the permitted capacity of the units or that would result in an emissions increase. To the contrary, the repairs and replacements are being made in an effort to reduce emissions, reliably control emissions, and achieve the permitted emission rates.

It should be noted that these units are the largest circulating fluidized beds (CFBs) in the world and the largest coke fired boilers in the world. The matters requiring further evaluation and correction during this ongoing shakedown are greater in number than with smaller, more conventional units. However, they are being handled in an expeditious manner, and we would be happy to discuss them more fully with you if that would be helpful.

If you have any questions, please don't hesitate to call me.

Thanks,

Bert
904-665-6247

P.S. I'll be out of the office next week, returning May 27.

7/29/2003

WTS Number	WTS Title	WTS Scope	
2-01	Replace transport piping	Replace horizontal run of limestone transport piping to unit one per sizing by J&J .	
2-02	Replace transport blowers	Replace complete transport blower skids with re-sized skids. Sizing to be recommended by J&J, skid design by Delta-Ducon/Gardner Denver/UCC.	
2-10	Insulate Day Bin and Hot PA Line.	Insulate Day Bin and Hot PA Line.	
4-05	Fuel silo (install rappers)	Install rappers on fuel silos to prevent flow stoppages.	
7-07	Final filter	Install redundant final filter and upgrade as required valves and valve controls around final filter and evaluate programming of final filter operation. Evaluate impact on boiler operation of final flush sequence.	
7-34	Replace AQCS Diaphragm Valves	Replace AQCS Diaphragm Valves	
13-05	Rotary valve motor gearbox change	Replace gearboxes and motors (7.5 hp) with chain tension adjustability. Drive will have to be changed out also. VFD's, gearbox (\$5k), motor all located in local panel May be able to move these over to limestone and save cost on 1-8.	

REGULATORY & ENVIRONMENTAL SERVICES DEPARTMENT



Air and Water Quality Division

May 2, 2003

Mr. N. Bert Gianazza, P.E.
Environmental Services
JEA
21 West Church Street
Jacksonville, FL 32202-3139

**Re: Duval County - Air Pollution
Temporary Burning of Coal with Dust Suppressant
Northside Generating Station Units 1 and 2
Permit Number: 0310045-003-AC (PSD-FL-265)**

Dear Mr. Gianazza:

The City of Jacksonville, Regulatory and Environmental Services Department, Air and Water Quality Division (AWQD) has reviewed JEA's request, dated May 2, 2003, to temporarily burn coal which has had a chemical dust suppressant added. It is our understanding that this coal will be trucked from the SJRPP and has already been approved for burning in the SJRPP combustion units by FDEP.

After consulting with FDEP/DARM/BAR concerning your request, AWQD approves the temporary burning of this coal in the Northside CFBs for the time period of May 2, 2003 to May 6, 2003. JEA shall maintain compliance with all applicable requirements of the existing air pollution source construction permit (0310045-003-AC). JEA shall submit a written report to AWQD no later than May 9, 2003, regarding; the amount of coal that has burned in each of the CFBs, time period this coal was burned, the fuel blend, number of truck loads and amount of coal trucked. A modification to the PSD permit will be necessary if JEA wants to burn coal treated with chemical dust suppressants in the Northside Generating Station Units 1 and 2 in the future.

Should you have any questions concerning this matter, please contact Mr. Richard L. Robinson, P.E. at (904) 630-4900.

Very truly yours,

A handwritten signature in cursive script that reads "Manning".

James L. Manning, P.E.
Division Chief

JLM/RLR/rmp

c: Mr. Chris Kirts, P.E., FDEP, Northeast District
Mr. Syed Arif, FDEP, DARM, Tallahassee
AWQD File 0045-K
AWQD Air Permitting File

S:\Permit\VPV2003\TVPD\0310045-003pd-AC

117 West Duval Street, Suite 225
Jacksonville, Florida 32202
Fax (904) 630-3638

Air Quality 630-4900
Water Quality 630-3404
Ground Water 630-4900
Hazardous Materials 630-3404

21 West Church Street
Jacksonville, Florida 32202-4139

May 7, 2003



Mr. James L. Manning, P.E.
Division Chief
Air and Water Quality Division
Regulatory and Environmental Services Dept.
117 West Duval Street, Suite 225
Jacksonville, Florida 32202-4111

Dear Mr. Manning:

RE: Northside Generating Station (NGS) Units 1 and 2
Construction Permit No. 0310045-003-AC (PSD-FL-265)

Please be advised that no trucking of coal from SJRPP to NGS was performed since the coal shipment to NGS was received in time.

JEA appreciates RESD's expeditious handling of our request to allow burning the SJRPP coal with added chemical dust suppressant in NGS Units 1 and 2 on a one-time emergency basis.

To avoid this situation in the future, the use of chemical dust suppressants will be added to the NGS Title V permit.

If you have any questions with regard to this matter, please call me at 665-6247.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Bert Gianazza", is written over a horizontal line.

N. Bert Gianazza, P.E.
Environmental Services

cc: Steve Pace, P.E., RESD
Richard Robinson, P.E., RESD

21 West Church Street
Jacksonville, Florida 32202-3139

May 2, 2003



Mr. James L. Manning, P.E.
Division Chief
Air and Water Quality Division
Regulatory and Environmental Services Dept.
117 West Duval Street, Suite 225
Jacksonville, Florida 32202-4111

Dear Mr. Manning:

E L E C T R I C

RE: Northside Generating Station Units 1 and 2
Construction Permit No. 0310045-003-AC (PSD-FL-265)

W A T E R

S E W E R

JEA requests approval to burn coal which has had a chemical dust suppressant added in the above referenced units on a one-time emergency basis due to a delay in receiving a shipment of coal. A summary of the events leading to this situation is provided in the attached e-mail dated May 1, 2003.

These units are currently operating on a blend of 85% pet coke and 15% coal. Coal is needed for reliability due to plugging problems resulting in extended shut down periods associated with burning 100% pet coke.

This coal has been approved for use in the SJRPP units per the attached correspondences between SJRPP and FDEP. The fuel conforms to all permit requirements and fuel specifications pertaining to the Northside CFBs, and will have no discernable adverse effects on emissions from these units. The coal will be trucked as needed from SJRPP to NGS. It is noted that trucking of fuel in this manner was previously permitted as an insignificant activity, and records of the number of truck loads and tons of fuel moved will be maintained.

A written report of the amount of this fuel that was burned in each of the units, over what time period, and at what fuel blend of coal and pet coke, along with any other pertinent information will be submitted to RESD by no later than May 9, 2003.

If you have any questions with regard to this matter, please call me at 665-6247.

Sincerely,

A handwritten signature in black ink, appearing to read 'N. Bert Gianazza', is written over a horizontal line.

N. Bert Gianazza, P.E.
Environmental Services

Enclosures

cc: Steve Pace, P.E., RESD
Richard Robinson, P.E., RESD

Gianazza, N. Bert

From: Killingsworth, Jessica Z.
Sent: Thursday, May 01, 2003 1:26 PM
To: Gianazza, N. Bert
Cc: Myers, Jim T.
Subject: Low coal inventory

As you requested, below you will find a brief description of the series of events that lead to a low coal inventory.

There were a series of events which led to the current low inventory level of coal. It started with an unplanned outage of unit 1 back in March which left the domes with little additional storage space. Unfortunately, JEA was already in agreement to take a shipment of petcoke by the end of March which then left no storage space for an early April delivery of coal (and then only other alternative given by the supplier was early May). After expressing an interest in an April 24-May 1 delivery to our coal supplier on March 31, a delivery for April 30 was set up. As the month progressed, the blend of fuel in both CFB units changed. In both instances the percentages of coal were raised which left the coal inventory lower than originally forecasted on March 31. The detrimental hit to the inventory came with news received on April 28 when it was learned that the vessel scheduled to bring the coal was held up five days in unloading its current cargo of sugar, due to rain.

Thank you,
Jessica Killingsworth
JEA Fuels Technician
(904) 665-8236
T-11

5/2/2003

EV102201



October 22, 2001

Florida Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road.
Tallahassee, FL 32399-2400

Attention: C. H. Fancy, P.E.: Chief

RE: Northside Generating Station/St. Johns River Power Park
Title V Permit # 0310045-002-AV
SJRPP Conditions of Certification PA 81-13
St. Johns River Power Park (SJRPP) PSD-FL-010D
Latex Binder as Dust Suppressant

Dear Mr. Fancy:

We are in receipt of your attached October 1, 2001 authorization letter for utilization of the latex binder Covol 298-1 to be applied to coal transported and/or applied at St. Johns River Power Park (SJRPP). Your letter stated that it was the understanding that this material would be used instead of the previously approved latex binder - Latex DL 298NA, which has been renamed Covol 298.

Please note that it was not our intention to utilize Covol 298-1 instead of Latex DL 298NA (Covol 298). SJRPP was requesting to utilize the Covol 298-1 in addition to Latex DL 298NA (Covol 298).

Please advise if there is any issue regarding the approval and utilization of both Covol 298 and Covol 298-1 for SJRPP. Please contact me at (904) 665-8729 if you have any questions.

Sincerely,


Jay Worley
SJRPP Group Leader

cc: Jonathan Holtom, P.E., FDEP
H. Oven, P.E., FDEP
S. Pace, P.E., RESD AWQD



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Scrubs
Secretary

October 1, 2001

Mr. Jay Worley
SJRPP Group Leader
Jacksonville Electric Authority
11201 New Berlin Road
Jacksonville, Florida 32226

Re: Recognition of Latex Binder as a Dust Suppressant

Dear Mr. Worley,

We have received your request to begin using a new formulation of latex binder (COVOL 298-1, made by DOW Chemical Company) on your coal as a means of suppressing fugitive dust. It is our understanding that this material will be used instead of the latex binder (Latex DL 298NA, made by DOW Chemical Company) that was previously approved on September 20, 2000, and that you will no longer be using the Latex DL 298NA.

It is our opinion that this particular material is nearly identical to the previously approved Latex DL 298NA and falls within the classification of "chemical dust suppressant" that is authorized by your Title V permit (see Facility-wide condition II.9., and Appendix TV-3, condition 57.). For inspection purposes, please retain on-site a copy of the material safety data sheet (MSDS), a copy of your contract with the coal supplier specifying the material that will be applied to your coal, and a certification from the supplier accompanying each delivery that attests that this is the only material that has been applied to your coal. If the supplier changes the material, you must inform the Department and receive approval prior to combusting the new product.

Under the provisions of Rule 62-297.310(7)(b), F.A.C., if, at any time, the Department has reason to believe that any of your emission limits are not being met (i.e. increased particulate matter, etc.), it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely,

C.H. Fancy, P.E.
Chief
Bureau of Air Regulation

cc: Buck Oven, P.E., DEP
James Manning, P.E., RESD

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EV092501



September 25, 2001

Florida Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attention: C. H. Fancy, P.E.; Chief

RE: Northside Generating Station/St. Johns River Power Park
Title V Permit # 0310045-002-AV
SJRPP Conditions of Certification PA 81-13
St. Johns River Power Park (SJRPP) PSD-FL-010D
Latex Binder as Dust Suppressant

Dear Mr. Fancy:

The Department in its September 20, 2000 letter (Attachment A) recognized the use of a latex binder as a chemical dust suppressant under the Facility-Wide Conditions (Condition II.9, Appendix TV-3, Condition 57). The latex material identified in the letter is manufactured by Dow Chemical Company and was identified as Latex DL 298NA. According to the Department's letter, if the supplier changes the material, the Department must be informed and approval received prior to combusting the new material. This correspondence presents information related to a minor change in the latex formulation made by the manufacturer.

The manufacturer Dow Chemical Company has enhanced the latex binder with the addition of minor amounts of acrylate and acetate polymers. The primary component of the material is still the carboxylated styrene butadiene polymer. The new formulation is designated as COVOL 298-1 and the MSDS sheet for this formulation is attached (Attachment B). The previous designation by Dow Chemical Company of Latex DL 298NA has been changed to COVOL 298. Therefore, the new formulation COVOL 298-1 reflects the addition of the new minor components to the previous formulation. The MSDS sheets for Latex DL 298NA, which is now COVOL 298 are also attached (Attachment C). A comparison of the MSDS sheets for Latex DL 298NA and COVOL 298 show that they are identical.

The acrylate and acetate polymers are similar to the previous formulation in these polymers are made up of the same elements as carboxylated styrene butadiene polymer, i.e., carbon, hydrogen and oxygen. The general formula for acrylate is $H_2C:CHCOOH$ and the general formula for acetate is

(CH₃COO)₂. A comparison of the MSDS sheets for the previous formulation (Latex DL 298NA or COVOL 298) show that the composition, description, and physical and chemical properties are substantially identical to the new formulation (COVOL 298-1). This can be seen by comparing the physical and chemical properties of the previous formulation to the new formulation as listed in Item 9 of the MSDS sheets. The combustion products of the new formulation would not be different from the previous formulation given that there is no change of the elements within the polymer (i.e., carbon, hydrogen and oxygen). In addition, there is no change in the amount of the new formulation that is applied to the coal.

Your expeditious review and approval of the new formulation is appreciated. Please contact me at (904) 665-8729 if you have any questions.

Sincerely,



Jay Worley
SJRPP Group Leader

Enclosures

cc: Jonathan Holtom, P.E., FDEP
H. Oven, P.E., FDEP
S. Pace, P.E., RESD AWQD

ATTACHMENT A



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

September 20, 2000

Mr. Jay Worley
SJRPP Group Leader
Jacksonville Electric Authority
11201 New Berlin Road
Jacksonville, Florida 32226

Re: Recognition of Latex Binder as a Dust Suppressant

Dear Mr. Worley,


We have received your request to begin using a latex binder on your coal as a means of suppressing fugitive dust (Latex DL 298NA, made by DOW Chemical Company). We have also received a certification from your Professional Engineer detailing the lack of detrimental environmental effects resulting from the use of this product.

It is our opinion that this particular material falls within the classification of "chemical dust suppressant" that is authorized by your Title V permit (see Facility-wide condition II.9., and Appendix TV-3, condition 57.). For inspection purposes, please retain on-site a copy of the material safety data sheet (MSDS), a copy of your contract with the coal supplier specifying the material that will be applied to your coal, and a certification from the supplier accompanying each delivery that attests that this is the only material that has been applied to your coal. If the supplier changes the material, you must inform the Department and receive approval prior to combusting the new product.

Under the provisions of Rule 62-297.310(7)(b), F.A.C., if, at any time, the Department has reason to believe that any of your emission limits are not being met (i.e. increased particulate matter, etc.), it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely,


C.H. Fancy, P.E.
Chief
Bureau of Air Regulation

cc: Kennard Kosky, P.E., Golder Associates
Buck Oven, P.E., DEP
James Manning, P.E., RESD

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ATTACHMENT B

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 989-636-4400

Product: COVOL 298-1

Product Code: 88220

Effective Date: 07/04/01 Date Printed: 07/05/01 MSD: 007085

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary Carboxylated Styrene/Butadiene/ Acrylate/Acetate Polymer	40-62*
Water	CAS# 007732-18-5 38-60*

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

.....

- Milky white liquid emulsion. Slight odor. Dike and contain spills.
- Avoid dilution of spills.

.....

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause moderate irritation. May cause slight corneal injury. Vapors or mists may cause eye irritation.

SKIN: Short single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause slight skin irritation. Material may stick to skin causing irritation upon removal. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

(Continued on Page 2)

* or (R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 2

Product Name: COVOL 298-1
Product Code: 88220

Effective Date: 07/04/01

Date Printed: 07/05/01

MSD: 007065

3. HAZARDS IDENTIFICATION (CONTINUED)

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYE: Flush eyes thoroughly with water for several minutes.
Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes.

SKIN: Wash off in flowing water or shower.

INGESTION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: Not applicable.

METHOD USED: Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABILITY LIMITS:

LEL: Not applicable.

UFL: Not applicable.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to organic compounds, carbon dioxide, carbon monoxide and dense smoke.

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn. Upon burning the product generates dense black smoke.

EXTINGUISHING MEDIA: To extinguish combustible residues of this

(Continued on Page 3)

* or (R) Indicates a Trademark of The Dow Chemical Company

Product Name: COVOL 296-1
Product Code: 68220

Effective Date: 07/04/01 Date Printed: 07/05/01 MSD: 007085

5. FIRE FIGHTING MEASURES (CONTINUED)

product use water fog, carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls/Personal Protection.

PROTECT THE ENVIRONMENT: Contain liquid to prevent contamination of soil, surface water or ground water.

CLEANUP: Recover and recycle spilled latex if possible. otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

7. HANDLING AND STORAGE

HANDLING: Practice reasonable care to avoid repeated, prolonged skin contact.

STORAGE: Store between 40F and 110F. May coagulate if frozen at 32F, 0C. Material may develop bacteria odor on long-term storage. No safety problems known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

(Continued on Page 4)

* or (R) Indicates a Trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE: 4

Product Name: CDVCL 298-1
Product Code: 88220

Effective Date: 07/04/01

Date Printed: 07/05/01

MSD: 007085

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

EYE/FACE PROTECTION: Use chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying respirator.

EXPOSURE GUIDELINES: None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Milky white liquid emulsion.

ODOR: Slight odor.

VAPOR PRESSURE: 17.5 mmHg @ 20C

VAPOR DENSITY: (air = 1) 0.62

BOILING POINT: 212F, 100C

SOLUBILITY IN WATER: Latex as sold is dilutable. Polymer component is insoluble.

SPECIFIC GRAVITY: Not determined

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: May coagulate if frozen. The dry resin is combustible.

INCOMPATIBILITY WITH OTHER MATERIALS: Addition of chemicals, such as acids or multivalent metal salts, may cause coagulation.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health

(Continued on Page 5)

* or (R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

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Product Name: COVOL 298-1
Product Code: 88220

Effective Date: 07/04/01

Date Printed: 07/05/01

MSD: 007085

Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: Single dose oral LD50 has not been determined.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight. Latex dispersions will color water a milky white.

DEGRADATION & PERSISTENCE: The polymeric component is not expected to biodegrade.

ECOTOXICITY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess

(Continued on Page 6)

* or (R) Indicates a Trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE: 6

Product Name: COVOL 298-1
Product Code: 88220

Effective Date: 07/04/01

Date Printed: 07/05/01

MSD: 007085

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-256-2436 or 989-632-1556 for further details.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:

(Continued on Page 7)

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MATERIAL SAFETY DATA SHEET

PAGE: 7

Product Name: COVOL 298-1
Product Code: 86220

Effective Date: 07/04/01

Date Printed: 07/05/01

MSD: 007085

REGULATORY INFORMATION: (CONTINUED)

This product contains a chemical(s) known to the State of California to cause cancer.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of


New Jersey
Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

16. OTHER INFORMATION

MSDS STATUS: Revised Section 2 (added compositional ranges).

* or  Indicates a Trademark of The Dow Chemical Company
The Information Herein is Given in Good Faith, But No Warranty, Express or Implied, is Made. Consult The Dow Chemical Company for Further Information.

ATTACHMENT C

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 517-636-4400

Product: LATEX DL 298NA

Product Code: 61584

Effective Date: 01/07/99 Date Printed: 02/29/00 MSD: 005213

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary carboxylated styrene/ butadiene polymer		40-62%
Water	CAS# 007732-18-5	38-60%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

.....
 * Milky white liquid emulsion. Slight odor. No significant immediate *
 * hazards for emergency response are known. Dike and contain spills. *
 * Avoid dilution of spills. *

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause slight transient (temporary) eye irritation.
 Corneal injury is unlikely.

SKIN: Short single exposure not likely to cause significant skin
 irritation. Prolonged or repeated exposure may cause slight
 skin irritation. Material may stick to skin causing irritation
 upon removal. A single prolonged exposure is not likely to
 result in the material being absorbed through the skin in
 harmful amounts.

INGESTION: Single dose oral toxicity is considered to be
 extremely low. No hazards anticipated from swallowing
 small amounts incidental to normal handling operations.

INHALATION: Single exposure to vapors is not likely to be
 hazardous.

(Continued on Page 2)

* or (R) Indicates a Trademark of The Dow Chemical Company

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

3. HAZARDS IDENTIFICATION (CONTINUED)

SYSTEMIC & OTHER EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYES: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: Not applicable

METHOD USED: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABILITY LIMITS:

LFL: Not applicable

UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to hydrocarbons, carbon monoxide and dense smoke.

(Continued on Page 3)

is a registered trademark & trademark of The Dow Chemical Company

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

5. FIRE FIGHTING MEASURES (CONTINUED)

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Avoid contact with eyes and skin.

PROTECT THE ENVIRONMENT: Contain material to prevent contamination of soil, surface water or ground water.

CLEANUP: Recover and recycle spilled latex if possible, otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

7. HANDLING AND STORAGE

HANDLING: Practice reasonable care to avoid repeated, prolonged skin contact. Addition of chemicals may cause coagulation.

STORAGE: Store at temperatures between 40F and 110F. May coagulate if frozen at 32F, 0C. Material may develop bacteria odor on long-term storage. No safety problems known.

(Continued on Page 4)

* or (R) Indicates a Trademark of The Dow Chemical Company

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use safety glasses.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: No respiratory protection should be needed.

EXPOSURE GUIDELINE(S): None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Milky white liquid emulsion.

ODOR: Slight odor.

VAPOR PRESSURE: 17.5 mmHg @ 20C

VAPOR DENSITY: 0.624 @ 80F

BOILING POINT: 212F, 100C

SOLUBILITY IN WATER: Latex as sold is dilutable. Polymer component is insoluble.

SPECIFIC GRAVITY: .980 - 1.040

The physical data listed are for a series of latexes. For specific properties on any given latex, see the product bulletin.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: Active ingredient decomposes at elevated temperatures. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence

(Continued on Page 5)

* or (R) Indicates a Trademark of The Dow Chemical Company

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

10. STABILITY AND REACTIVITY (CONTINUED)

of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: The oral LD50 for rats is > 5000mg/kg for similar materials.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight. Latex dispersions will color water a milky white.

DEGRADATION & TRANSFORMATION: The polymeric component is not expected to biodegrade.

ECOTOXICOLOGY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT

(Continued on Page 6)

or (R) indicates a Trademark of The Dow Chemical Company

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

DISPOSAL CONSIDERATIONS: (CONTINUED)

PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 517-832-1556 for further details.

14. TRANSPORT INFORMATION

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

U. S. DEPARTMENT OF TRANSPORTATION (D.O.T.):

This product is not regulated by DOT when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

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* or (R) Indicates a Trademark of The Dow Chemical Company

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

REGULATORY INFORMATION: (CONTINUED)

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CANADIAN REGULATIONS
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WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

MSDS STATUS: Revised Section 13

* or (R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company For
Further Information.

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 517-636-4400

Product: COVOL 298

Product Code: 82953

Effective Date: 01/07/99

Date Printed: 12/14/00

MSD: 005213

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary carboxylated styrene/
butadiene polymer

40-62%

Water

CAS# 007732-18-5

38-60%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- * Milky white liquid emulsion. Slight odor. No significant immediate
- * hazards for emergency response are known. Dike and contain spills.
- * Avoid dilution of spills.

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause slight transient (temporary) eye irritation.
Corneal injury is unlikely.

SKIN: Short single exposure not likely to cause significant skin
irritation. or repeated exposure may cause slight
skin irritation. Prolonged exposure is not likely to
cause skin irritation. Being absorbed through the skin in

All toxicity is considered to be
anticipated from swallowing
to normal handling operations.

to vapors is not likely to be

Dow Chemical Company

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Product: COVOL 298
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Effective Date: 01/07/99

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3. HAZARDS IDENTIFICATION (CONTINUED)

SYSTEMIC & OTHER EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYES: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: Not applicable

METHOD USED: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABILITY LIMITS:

LFL: Not applicable

UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to hydrocarbons, carbon monoxide and dense smoke.

(Continued on Page 3)

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Product: COVOL 298
Product Code: 82953

Effective Date: 02/07/99

Date Printed: 12/14/00

MSD: 005213

5. FIRE FIGHTING MEASURES (CONTINUED)

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Avoid contact with eyes and skin.

PROTECT THE ENVIRONMENT: Contain material to prevent contamination of soil, surface water or ground water.

CLEANUP: Recover and recycle spilled latex if possible, otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

7. HANDLING AND STORAGE

HANDLING: Practice reasonable care to avoid repeated, prolonged skin contact. Addition of chemicals may cause coagulation.

STORAGE: Store at temperatures between 40F and 110F. May coagulate if frozen at 32F, 0C. Material may develop bacteria odor on long-term storage. No safety problems known.

(Continued on Page 4)

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Product: COVOL 298
Product Code: 82953

Effective Date: 01/07/99

Date Printed: 12/14/00

MSD: 005213

6. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use safety glasses.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: No respiratory protection should be needed.

EXPOSURE GUIDELINE(S): None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Milky white liquid emulsion.

ODOR: Slight odor.

VAPOR PRESSURE: 17.5 mmHg @ 20C

VAPOR DENSITY: 0.624 @ 80F

BOILING POINT: 212F, 100C

SOLUBILITY IN WATER: Latex as sold is dilutable. Polymer component is insoluble.

SPECIFIC GRAVITY: .980 - 1.040

The physical data listed are for a series of latexes. For specific properties on any given latex, see the product bulletin.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: Active ingredient decomposes at elevated temperatures. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence

(Continued on Page 5)

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Product: COVOL 298
Product Code: 82953

Effective Date: 01/07/99

Date Printed: 12/14/00

MSD: 005213

10. STABILITY AND REACTIVITY (CONTINUED)

of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: The oral LD50 for rats is > 5000mg/kg for similar materials.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight. Latex dispersions will color water a milky white.

DEGRADATION & TRANSFORMATION: The polymeric component is not expected to biodegrade.

ECOTOXICOLOGY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT

(Continued on Page 6)

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M A T E R I A L S A F E T Y D A T A S H E E T

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Product: COVOL 296
Product Code: 82953

Effective Date: 01/07/99

Date Printed: 12/14/00

MSD: 005213

DISPOSAL CONSIDERATIONS: (CONTINUED)

PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 517-832-1556 for further details.

14. TRANSPORT INFORMATION

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

U. S. DEPARTMENT OF TRANSPORTATION (D.O.T.):

This product is not regulated by DOT when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

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M A T E R I A L S A F E T Y D A T A S H E E T

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Product: COVOL 298

Product Code: 82953

Effective Date: 01/07/99

Date Printed: 12/14/00

MSD: 005213

REGULATORY INFORMATION: (CONTINUED)

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CANADIAN REGULATIONS

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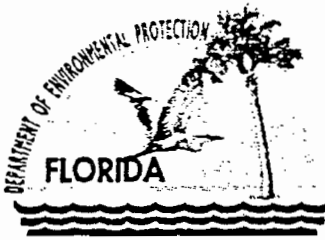
WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

MSDS STATUS: Revised Section 13

* or (R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company For
Further Information.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

September 20, 2000

Mr. Jay Worley
SJRPP Group Leader
Jacksonville Electric Authority
11201 New Berlin Road
Jacksonville, Florida 32226

Re: Recognition of Latex Binder as a Dust Suppressant

Dear Mr. Worley,

We have received your request to begin using a latex binder on your coal as a means of suppressing fugitive dust (Latex DL 298NA, made by DOW Chemical Company). We have also received a certification from your Professional Engineer detailing the lack of detrimental environmental effects resulting from the use of this product.

It is our opinion that this particular material falls within the classification of "chemical dust suppressant" that is authorized by your Title V permit (see Facility-wide condition II.9., and Appendix TV-3, condition 57.). For inspection purposes, please retain on-site a copy of the material safety data sheet (MSDS), a copy of your contract with the coal supplier specifying the material that will be applied to your coal, and a certification from the supplier accompanying each delivery that attests that this is the only material that has been applied to your coal. If the supplier changes the material, you must inform the Department and receive approval prior to combusting the new product.

Under the provisions of Rule 62-297.310(7)(b), F.A.C., if, at any time, the Department has reason to believe that any of your emission limits are not being met (i.e. increased particulate matter, etc.), it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely,

C.H. Fancy, P.E.
Chief
Bureau of Air Regulation

cc: Kennard Kosky, P.E., Golder Associates
Buck Oven, P.E., DEP
James Manning, P.E., RESD

Golder Associates Inc.

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



September 18, 2000

983-7561

Florida Department of Environmental Protection
Title V Section; Bureau of Air Regulation (BAR)
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Attention: Mr. C.H. Fancy, P.E.

RE: Northside Generating Station/St. Johns River Power Park (SJRPP)
Title V Permit # 0310045-002-AV
SJRPP Conditions of Certification PA 81-13
St. Johns River Power Park PSD-FL-010D
Application of Dust Suppressant - Disclosure

Dear Clair:

St. Johns River Power Park has notified the Department of the use of coal sprayed with a latex binder. As discussed with Mr. Jonathan Holtom of BAR, the Department would like a certification from a professional engineer regarding the use of the latex material as fugitive dust control and provide additional information on several areas. The additional information requested included the potential for VOC emissions from the latex covering, the combustion products, and the potential of other environmental affects of the coal with latex.

The latex material, as provided in the MSDS sheet (Latex DL 298NA), is proprietary polymer (40 to 62 percent) and water (38 to 60 percent). The polymer is characterized as proprietary carboxylated styrene/butadiene polymer. This latex material, when applied as a coating is very similar to styrene-butadiene rubber (SBR). SBR is the most widely used type of synthetic rubber polymer and is used in a wide variety of products including coatings. The material is very similar to latex paints, which are emulsions of SBR, polyvinyl acetate and acrylic resins. Latex DL 298 NA, however, does not contain any pigments, and the polymer is primarily made up of carbon and hydrogen. The term "carboxylated" refers to carbonyl ($=C=O$) and a hydroxyl group ($-OH$) bonded to a carbon atom. When used with coal, the latex serves as an ideal binder, since SBR has unique properties of deformation (elongation or yield under stress). As such, the latex acts to minimize emissions of fugitive dust during transfer and handling. The application of the latex mixture is uniform throughout the coal making up 0.2 percent. Thus, the characteristics of minimizing fugitive dust are throughout the coal and not just on the surface. This will minimize fugitive dust during all handling operations.

When applied, there would be a negligible amount of VOCs emitted, since the polymer is suspended in a water emulsion and will be applied offsite. Even if applied on-site, the VOC emissions would be negligible given that the latex formula is applied in a very dilute form (9 parts water to 1 part latex).

The coal with the small amount of latex would not change the emission characteristics of the SJRPP units. This is based on the contents of the latex, the small amount of latex with the coal and the uniform distribution of the latex material. The latex polymer consists primarily of carbon and hydrogen, since SBR has a formula of $C_{12}H_{14}$ with minor amounts of oxygen. The amount of latex is low at 0.1 percent solids in the coal and is uniformly distributed throughout the coal. The coal is pulverized, further mixing the small amounts of latex. Combustion temperatures in excess of 2,000 degrees F would completely break down the latex to carbon dioxide and water.

In the letter to the Department from Mr. Jay Worley, an MSDS sheet was included for another dust suppressant product referred to as "Dust Ban 7823 Liquid" manufactured by Nalco Chemical. This was included as an example of the dust suppressants available on the market that are made primarily of a polymer material. This material is currently used to minimize fugitive dust at a coal-fired power plant in Virginia, for which I conducted some consulting services. It should be noted that the latex to be used for the SJRPP coal does not contain any alcohol or light distillate compounds.

The use of the latex material as a means to control fugitive dusts at SJRPP is authorized by Specific Condition III. E.3. of the Final Title V permit and is referenced in Subsection E of the Final Title V Permit for the coal storage yard and transfer system. Rule 62-296.320(4)(c)3.c. F.A.C. allows the use of "chemical or other dust suppressants to ... open stock piles and similar activities". The PSD approval (PSD-FL-010D) also allows the use of chemical agents for particulate control. Review of EPA documents clearly indicates that latex is an available control technology for fugitive dust control.

After application, the latex material would not cause any surface runoff issues as the polymer is insoluble and is bound to the coal. Even if sprayed at the plant site, there would be no runoff from the latex. Once dried, the polymer would be insoluble and, as stated above, bound to the coal.

Please call if you have any further questions. I can be reached at (352) 336-5600 ext. 516.

Sincerely,

GOLDER ASSOCIATES INC.



Kennard F. Kosky, P.E.
Principal
Professional Engineer No. 14996

SEAL



Enclosures

cc: Jay Worley, SJRPP Group Leader
Jonathan Holtom, P.E., FDEP Title V Section
Syed Arif, P.E., FDEP New Source Review
H. Oven, FDEP
S. Pace, RESD AWQD

Document1

August 17, 2000



Mr. Clair Fancy
Florida Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
MS 5505
Tallahassee, FL 32399-2400

RE: Northside Generating Station/St. Johns River Power Park (SJRPP)
Title V Permit # 0310045-002-AV
SJRPP Conditions of Certification PA 81-13
SJRPP PSD-FL-010D
Recognition of Dust Suppressant Use

Dear Mr. Fancy:

Pursuant to an August 15, 2000 telephone conversation with Mr. Bruce Mitchell and Mr. Syed Arif of your office, the St. Johns River Power Park (SJRPP) is considering the use of coal sprayed with a latex binder. The coal will be the same coal as currently used at SJRPP. Coal from the mine will be screened and then sprayed with the latex binder prior to shipment to the plant. The amount of latex binder utilized with coal is 0.2 percent by weight with the latex portion making up 50 percent of the binder and the remainder water. Therefore, the amount of latex material is 0.1 percent by weight in the latex binder coal mixture. The latex material, as provided in the attached MSDS sheet (Latex DL 298NA), is described as a proprietary polymer (40 to 62 percent) and water (38 to 60 percent). As noted from the attached MSDS, the latex material is stable and decomposes at elevated temperatures. (Attachment A)

Latex is a broad classification that includes synthetic material made as emulsions with particle sizes ranging from 0.5 to 0.15 micron. The latex material proposed to be used consists of carbon (about 91 percent) and hydrogen (about 9 percent). While this has advantages to SJRPP from an economic standpoint, the actual physical and chemical result will minimize emissions of fugitive dust.

Latex binders are used as common dust suppressants. The Environmental Protection Agency document titled "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures" identifies latex binders as a potential control option with high control efficiencies. (Refer to

EPA-450/2-92-004, September 1992, Pages 3-28 and 3-44). A product identified as M-167 is a Dow Chemical Company latex binder. Also, please refer to Attachment B as an example of a similar dust suppressant that is used at coal fired power plants.

This type of material can currently be used at SJRPP as a control measure to reduce fugitive dust. Specific Condition III, E.3. requires the use of "control systems and control techniques established to minimize particulate matter emissions for emission units 4 through 17 in Revised Table 2". These are the emission units associated with the coal storage yard and transfer systems. Subsection E of the Title V Permit for the coal storage yard and transfer system allows the express use of "wetting agents" for fugitive dust control. This is supported by Rule 62-296.320(4)(c)3.c. F.A.C. which allows the use of "chemical or other dust suppressants to ... open stock piles and similar activities". The PSD approval (PSD-FL-010D) also allows the use of chemical agents for particulate control. SJRPP has previously used chemical dust suppressants at the plant.

Applying the latex binder at the mine will provide additional dust suppression along the transportation route and when unloading the coal. Coal, containing the binder, when placed in the storage piles, will have less fugitive emissions during handling, storage and subsequent transfer to the plant.

According to Rule 62-213.410(3) F.A.C., SJRPP is notifying the Department of implementing the use of a latex dust suppressant as a binder in the coal. Upon FDEP's concurrence, shipments of coal, with this latex dust suppressant, are anticipated to commence in September 2000. The use of the binder will not change any air pollutant emissions from the facility, except for reducing the potential of fugitive dust emissions.

Your expeditious review is appreciated. Please contact me at (904) 665-8729 if you have any questions.

Sincerely,



Jay Worley
SJRPP Group Leader

Attachments

cc: S. Arif, FDEP
B. Mitchell, FDEP
H. Oven, FDEP
S. Pace, RESD

bcc: T. Bavington, w/o attachment
L. Bradley ·
B. LeMay ·
A. Cobb ·
P. Smith ·
S. Hughes ·
M. Loechelt, w/attachment
B. Gianazza ·
B. Para ·
K. Kosky, Golder ·
SJRPP Records ·

ATTACHMENT A

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 517-636-4400

Product: LATEX DL 298NA

Product Code: 61584

Effective Date: 01/07/99 Date Printed: 02/29/00 MSD: 005213

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary carboxylated styrene/ butadiene polymer		40-62%
Water	CAS# 007732-18-5	38-60%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

 * Milky white liquid emulsion. Slight odor. No significant immediate *
 * hazards for emergency response are known. Dike and contain spills. *
 * Avoid dilution of spills. *

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause slight transient (temporary) eye irritation.
 Corneal injury is unlikely.

SKIN: Short single exposure not likely to cause significant skin
 irritation. Prolonged or repeated exposure may cause slight
 skin irritation. Material may stick to skin causing irritation
 upon removal. A single prolonged exposure is not likely to
 result in the material being absorbed through the skin in
 harmful amounts.

INGESTION: Single dose oral toxicity is considered to be
 extremely low. No hazards anticipated from swallowing
 small amounts incidental to normal handling operations.

INHALATION: Single exposure to vapors is not likely to be
 hazardous.

(Continued on Page 2)

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Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

3. HAZARDS IDENTIFICATION (CONTINUED)

SYSTEMIC & OTHER EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYES: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: Not applicable

METHOD USED: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABILITY LIMITS:

LFL: Not applicable

UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to hydrocarbons, carbon monoxide and dense smoke.

(Continued on Page 3)

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Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

5. FIRE FIGHTING MEASURES (CONTINUED)

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Avoid contact with eyes and skin.

PROTECT THE ENVIRONMENT: Contain material to prevent contamination of soil, surface water or ground water.

CLEANUP: Recover and recycle spilled latex if possible, otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

7. HANDLING AND STORAGE

HANDLING: Practice reasonable care to avoid repeated, prolonged skin contact. Addition of chemicals may cause coagulation.

STORAGE: Store at temperatures between 40F and 110F. May coagulate if frozen at 32F, 0C. Material may develop bacteria odor on long-term storage. No safety problems known.

(Continued on Page 4)

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Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use safety glasses.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: No respiratory protection should be needed.

EXPOSURE GUIDELINE(S): None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Milky white liquid emulsion.

ODOR: Slight odor.

VAPOR PRESSURE: 17.5 mmHg @ 20C

VAPOR DENSITY: 0.624 @ 80F

BOILING POINT: 212F, 100C

SOLUBILITY IN WATER: Latex as sold is dilutable. Polymer component is insoluble.

SPECIFIC GRAVITY: .980 - 1.040

The physical data listed are for a series of latexes. For specific properties on any given latex, see the product bulletin.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: Active ingredient decomposes at elevated temperatures. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence

(Continued on Page 5)

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Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

10. STABILITY AND REACTIVITY (CONTINUED)

of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: The oral LD50 for rats is > 5000mg/kg for similar materials.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight. Latex dispersions will color water a milky white.

DEGRADATION & TRANSFORMATION: The polymeric component is not expected to biodegrade.

ECOTOXICOLOGY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT

(Continued on Page 6)

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Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

DISPOSAL CONSIDERATIONS: (CONTINUED)

PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 517-832-1556 for further details.

14. TRANSPORT INFORMATION

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

U. S. DEPARTMENT OF TRANSPORTATION (D.O.T.):

This product is not regulated by DOT when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

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(Continued on Page 7)

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Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 01/07/99

Date Printed: 02/29/00

MSD: 005213

REGULATORY INFORMATION: (CONTINUED)

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CANADIAN REGULATIONS

=====

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

MSDS STATUS: Revised Section 13

* or (R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company For
Further Information.

ATTACHMENT B



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
 Medical (800) 462-6378 (24 hours) (800) I-M-ALERT

SECTION 01 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: DUST BAN 7823 LIQUID
 DESCRIPTION: An acrylamide/acrylate polymer in a water and oil emulsion

NFPA 704M/HMIS RATING: 1/1 HEALTH 1/1 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
 0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 02 COMPOSITION AND INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient(s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 15 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX. %
Ethoxylated alcohol	68002-97-1	1-5
Hydrotreated light distillate	64742-47-8	20-40

SECTION 03 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING! Causes irritation to skin and eyes. Do not get in eyes, on skin, or on clothing. Wear goggles and face shield when handling. Avoid prolonged or repeated breathing of vapor. Use with adequate ventilation. Do not take internally. Keep container closed when not in use.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin

EYE CONTACT: Can cause mild to moderate irritation.
SKIN CONTACT: Can cause mild to moderate irritation.
INHALATION: May cause irritation to the upper respiratory tract.

SYMPTOMS OF EXPOSURE:

ACUTE: Inhalation of high concentrations of hydrotreated light distillate can cause nausea, dizziness, vomiting, stupor or unconsciousness.

CHRONIC: Prolonged skin contact with product can cause dry skin and defatting resulting in irritation and dermatitis.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not

PAGE 1 OF 9

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60563-1198
 AREA (800) 305-1000



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
 Medical (800) 462-5378 (24 hours) (800) I-M-ALERT

identify any worsening of existing conditions.

SECTION 04 FIRST AID INFORMATION

EYES: Flush with water for 15 minutes. Call a physician.
 SKIN: Wash thoroughly with soap and rinse with water. Call a physician.
 INGESTION: Do not induce vomiting. Give water. Call a physician.
 INHALATION: Remove to fresh air. Treat symptoms. Call a physician.

NOTE TO PHYSICIAN: Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

SECTION 05 FIRE FIGHTING MEASURES

FLASH POINT: Greater than 200 Degrees F (FMCC) ASTM D-93

EXTINGUISHING MEDIA: This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use water to cool containers exposed to fire.

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve NOx under fire conditions.

SECTION 06 ACCIDENTAL RELEASE MEASURES

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (800) I-M-ALERT or (800) 462-5378.

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 15.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 15.

SECTION 07 HANDLING AND STORAGE

PAGE 2 OF 9



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
Medical (800) 482-5378 (24 hours) (800) I-M-ALERT

Storage : Keep container closed when not in use.

SECTION 08 EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists are generated, use either a chemical cartridge respiratory with a dust/mist prefilter or supplied air.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a positive pressure, self-contained breathing apparatus is recommended.

VENTILATION: General ventilation is recommended.

PROTECTIVE EQUIPMENT: Use impermeable gloves and chemical splash goggles when attaching feeding equipment, doing maintenance or handling product. Examples of impermeable gloves available on the market are neoprene, nitrile, PVC, natural rubber, viton and butyl (compatibility studies have not been performed).

The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

HUMAN EXPOSURE CHARACTERIZATION: Based on Nalco's recommended product application and our recommended personal protective equipment, the potential human exposure is: MODERATE.

SECTION 09 PHYSICAL AND CHEMICAL PROPERTIES

COLOR:	White, opaque	FORM:	Liquid
ODOR:	Hydrocarbon		
DENSITY:	8.4-8.9 lbs/gal.		
SPECIFIC GRAVITY:	1.01-1.05 @ 60 Degrees F	ASTM D-1298	
VISCOSITY:	940 cps @ 60 Degrees F	ASTM D-2986	
FREEZE POINT:	Less than -50 Degrees F	ASTM D-1177	
FLASH POINT:	Greater than 200 Degrees F (FMCC)	ASTM D-93	
VOLATILE ORGANIC COMPOUND (VOC):	1.87 lbs/gal.	EPA METHOD 24	

NOTE: These physical properties are typical values for this product.

PAGE 3 OF 3



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
 Medical (800) 462-5376 (24 hours) (800) FM-ALERT

SECTION 10 STABILITY AND REACTIVITY

INCOMPATIBILITY: Avoid water contamination which may cause gelling.

Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO₂, NO_x may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 11 TOXICOLOGICAL INFORMATION

TOXICITY STUDIES: Toxicity studies have not been conducted on this product, but toxicity studies of the ingredient(s) in Section 2 have been reviewed. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS):
 Ethoxylated alcohol LD50 = 2,800 mg/kg
 Hydrotreated light distillate LD50 = 40,000 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS):
 Ethoxylated alcohol LD50 = 1,000-3,000 mg/kg
 Hydrotreated light distillate LD50 = 2,000 - 4,000 mg/kg

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):
 SKIN IRRITATION INDEX DRAIZE RATING:
 4.4-5.1/8.0 Ethoxylated alcohol
 5.2/8.0 Hydrotreated light distillate

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):
 EYE IRRITATION INDEX DRAIZE RATING:
 51-94/110 Ethoxylated alcohol
 5/110.0 Hydrotreated light distillate

HUMAN HAZARD CHARACTERIZATION: Based on our hazard characterization, the potential human hazard is: LOW

SECTION 12 ECOLOGICAL INFORMATION

If released into the environment, see CERCLA in Section 15.



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
 Medical (800) 462-5378 (24 hours) (800) I-M-ALERT

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION: Based on our Hazard Characterization, the potential environmental hazard is: MODERATE. Based on Nalco's recommended product application and the product's characteristics, the potential environmental exposure is: MODERATE.

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous liquid waste, it should be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to an industrial waste landfill. A non-hazardous liquid waste can also be incinerated in accordance with local, state and federal regulations.

SECTION 14 TRANSPORTATION INFORMATION

PROPER SHIPPING NAME/HAZARD CLASS MAY VARY BY PACKAGING, PROPERTIES, AND MODE OF TRANSPORTATION. TYPICAL PROPER SHIPPING NAMES FOR THIS PRODUCT ARE:

ALL TRANSPORTATION MODES : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

SECTION 15 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

Ethoxylated alcohol - Eye/skin irritant
 Hydrotreated light distillate - Skin irritant

Hydrotreated light distillate (oil mist) - TWA 5 mg/m³ ACGIH/TLV

Hydrotreated light distillate (oil mist) - TWA 5 mg/m³.

**MATERIAL SAFETY DATA****PRODUCT****DUST BAN 7823 LIQUID**

Emergency Telephone Number _____
 Medical (800) 462-5378 (24 hours) (800) HM-ALERT

STEL 10 mg/m3 OSHA/PEL

CERCLA/SUPERFUND, 40 CFR 117, 302:
 Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
 (TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):
 This product does not contain ingredients listed in Appendix A and B as an
 Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):
 Our hazard evaluation has found this product to be hazardous. The product
 should be reported under the following EPA hazard categories:

- XX Immediate (acute) health hazard
- Delayed (chronic) health hazard
- Fire hazard
- Sudden release of pressure hazard
- Reactive hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the
 reporting of hazardous chemicals. The current thresholds are: 500 pounds or
 the threshold planning quantity (TPQ), whichever is lower, for extremely
 hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):
 This product does not contain ingredients on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):
 The chemical ingredients in this product are on the 8(b) Inventory List
 (40 CFR 710).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
 Consult Section 13 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15
 (formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):
 None of the ingredients are specifically listed.

CLEAN AIR ACT, Sec. 111 (40 CFR 60), Sec. 112 (40 CFR 61, 1990 Amendments),
 Sec. 611 (40 CFR 82, CLASS I and II Ozone depleting
 substances):

This product does not contain ingredients covered by the Clean Air Act.

PAGE 6 OF 9



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
Medical (800) 462-5378 (24 hours) (800) HM-ALERT

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product does not contain any chemicals which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS:

The following ingredient(s) are disclosed for compliance with State Right To Know Laws:

Ethoxylated alcohol	68002-97-1
Fatty acid ester	Trade secret
Hydrotreated light distillate	64742-47-8
Polycrylamide	Trade secret
Polyol ester	Trade secret
Water	7732-18-5

INTERNATIONAL REGULATIONS:

This is a WHMIS controlled product under The House of Commons of Canada Bill C-70 (Class D2B). The product contains the following substance(s), from the Ingredient Disclosure List or has been evaluated based on its toxicological properties, to contain the following hazardous ingredients(s):

Chemical Name	CAS #	Concentration Range
Ethoxylated alcohol	68002-97-1	1-5
Hydrotreated light distillate	64742-47-8	20-40

SECTION 16 OTHER INFORMATION

Nalco internal F101202

SECTION 17 RISK CHARACTERIZATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we have characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

PAGE 7 OF 9

BEST AVAILABLE COPY

FM 50 10



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
Medical (800) 462-5378 (24 hours) (800) I-M-ALERT

- The human risk is: LOW.
- The environmental risk is: MODERATE.

Any use inconsistent with Nalco's recommendations may affect our risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 18 REFERENCES

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH.

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (CD-ROM version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (CD-ROM version), Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, Ohio (CD-ROM version), Micromedex, Inc., Englewood, CO.

PAGE 3 OF 3

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60563-1198
AREA (800) 305-1000



MATERIAL SAFETY DATA

PRODUCT

DUST BAN 7823 LIQUID

Emergency Telephone Number
Medical (800) 482-5378 (24 hours) (800) I-M-ALERT

Shepard's Catalog of Teratogenic Agents (CD-ROM version),
Micromedex, Inc., Englewood, CO.

Suspect Chemicals Sourcebook (a guide to industrial chemicals covered
under major regulatory and advisory programs), Roytech Publications
(a Division of Ariel Corporation), Bethesda, MD.

The Teratogen Information System, University of Washington, Seattle,
Washington (CD-ROM version), Micromedex, Inc., Englewood, CO.

PREPARED BY: William S. Utley, Ph.D., DABT, Manager, Product Safety
DATE CHANGED: 02/23/1999 DATE PRINTED: 03/28/1999



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

February 17, 2003

CERTIFIED MAIL – Return Receipt Requested

Mr. James M. Chansler, P.E., D.P.A.
V.P., Operations & Maintenance and Responsible Official
JEA
21 West Church Street
Jacksonville, Florida 32202

Re: Request For Additional Time to Respond to an Incompleteness Letter
Title V Air Operation Permit Revision Application
Northside Generating Station
Permit Project No.: 0310045-010-AV
Facility ID: **0310045**
Nos. 1 and 2 Circulating Fluidized Bed Boilers

Dear Mr. Chansler:

On February 11, 2003, the Department received Mr. N. Bert Gianazza's letter request for additional time to respond to an incompleteness letter dated September 18, 2002. Pursuant to Rule 62-213.420(1)(b)6.c., F.A.C., the request is acceptable and the extension is granted, which concludes on October 1, 2003, close of business.

If you have any other questions, please contact Bruce Mitchell at 850/413-9198.

Sincerely,

Trina L. Vielhauer
Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/SMS/bm

Enclosure

cc: Scott M. Sheplak, P.E.
Richard Robinson, Duval County

"More Protection, Less Process"

Printed on recycled paper.

21 West Church Street
Jacksonville, Florida 32202-3139

RECEIVED

FEB 11 2003

BUREAU OF AIR REGULATION



February 10, 2003

Ms. Trina L. Vielhauer
Bureau Chief
Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Northside Generating Station Units 1 and 2
Permit No. 0310045-008-AV and PSD-FL-265

Dear Ms. Vielhauer:

Per my conversation with Bruce Mitchell of your staff, please issue an extension until October 1, 2003 (the expiration date of construction permit PSD-FL-265) to respond to the Department's incompleteness letter dated September 18, 2002. This extension is needed to engineer and implement a fix to the natural gas-fired limestone dryers' particulate control system and perform the required stack-testing, and to provide other information required by the Department to process our application.

If you have any questions, please call me at (904) 665-6247.

Sincerely,

A handwritten signature in black ink, appearing to read 'N. Bert Gianazza', is written over a light blue rectangular background.

N. Bert Gianazza, P.E.
Environmental Services

cc: Scott Sheplak, P.E., FDEP
Bruce Mitchell, P.E., FDEP
Steve Pace, P.E., RESD

Mitchell, Bruce

To: robinson@coj.net
Cc: Sheplak, Scott
Subject: Incompleteness letter for JEA Northside Repowering.

2/14/03

Dear Richard,

My bad that you were not copied on the incompleteness letter for the above referenced project. Take care.

Bruce



0310045.010.Inco 0310045.010.respo
mpleteness.Let... nse.to.reques...

21 West Church Street
Jacksonville, Florida 32202-3139

RECEIVED

FEB 11 2003

BUREAU OF AIR REGULATION



February 10, 2003

Ms. Trina L. Vielhauer
Bureau Chief
Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Northside Generating Station Units 1 and 2
Permit No. 0310045-008-AV and PSD-FL-265

Dear Ms. Vielhauer:

Per my conversation with Bruce Mitchell of your staff, please issue an extension until October 1, 2003 (the expiration date of construction permit PSD-FL-265) to respond to the Department's incompleteness letter dated September 18, 2002. This extension is needed to engineer and implement a fix to the natural gas-fired limestone dryers' particulate control system and perform the required stack-testing, and to provide other information required by the Department to process our application.

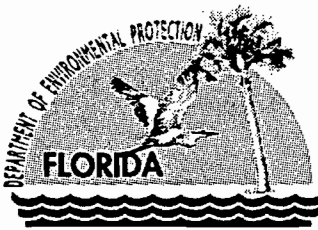
If you have any questions, please call me at (904) 665-6247.

Sincerely,

N. Bert Gianazza, P.E.
Environmental Services

cc: **Scott Sheplak, P.E., FDEP**
Bruce Mitchell, P.E., FDEP
Steve Pace, P.E., RESD

*Bruce,
please draft
response for my
signature.
S.H.
2/14*



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

December 18, 2002

CERTIFIED MAIL – Return Receipt Requested

Mr. James M. Chansler, P.E., D.P.A.
V.P., Operations & Maintenance and Responsible Official
JEA
21 West Church Street
Jacksonville, Florida 32202

Re: Request For Additional Time to Respond to an Incompleteness Letter
Title V Air Operation Permit Revision Application
Northside Generating Station
Permit Project No.: 0310045-010-AV
Facility ID: 0310045
Nos. 1 and 2 Circulating Fluidized Bed Boilers

Dear Mr. Chansler:

On December 10, 2002, the Department received Mr. N. Bert Gianazza's letter request for additional time (60-day extension) to respond to an incompleteness letter dated September 18, 2002. Pursuant to Rule 62-213.420(1)(b)6.b., F.A.C., the request is acceptable and the 60-day extension is granted, which concludes on February 15, 2003, close of business.

If you have any other questions, please contact Bruce Mitchell at 850/413-9198.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/SMS/bm

Enclosure

cc: Scott M. Sheplak, P.E.

"More Protection, Less Process"

Printed on recycled paper.

RECEIVED

DEC 10 2002

BUREAU OF AIR REGULATION

December 9, 2002



Mr. Scott Sheplak, P.E.
Administrator
Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

ELECTRIC

WATER

SEWER

RE: Northside Generating Station Units 1 and 2
Permit No. 0310045-008-AV

Dear Mr. Sheplak:

In response to your incompleteness letter dated September 18, 2002, and per my conversations with Bruce Mitchell of your staff, please issue a 60-day extension for providing the required response.

This additional time is needed to address the item in your letter and provide other information required by the Department to process our application.

If you have any questions, please call me at (904) 665-6247.

Sincerely,

N. Bert Gianazza, P.E.
Environmental Services

cc: Bruce Mitchell, P.E., FDEP
Steve Pace, P.E., RESD

Mitchell, Bruce

To: Linero, Alvaro; Comer, Patricia
Cc: Sheplak, Scott; Vielhauer, Trina
Subject: FW: Meeting with JEA on Excess Emissions Issues

12/17/02

Any comments?

Bruce

-----Original Message-----

From: Wayne Tutt [mailto:TUTT@coj.net]
Sent: Thursday, December 12, 2002 11:23 AM
To: Dana Brown; Steve Pace; Ron Roberson; Richard Robinson; Wayne Walker; Jerry Woosley
Subject: Meeting with JEA on Excess Emissions Issues

A meeting has been scheduled with JEA on Wednesday, January 8th, at 2pm to discuss various issues which have come up regarding excess emissions. The repowered units at Northside Generating Station have experienced "malfunctions", which have resulted in emissions of SO2 above the permitted limit of 0.2#/ MMBtu, 24 hour average. Permit no. 031 004603 AC, condition 26., Excess Emissions, states in part "...excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed twelve (12) hours in any 24 hour period for a startup on Units 1 and 2 (which shall not be started up at the same time) or two (2) hours in any 24 hour period for other reasons and for all other units and operations unless specifically authorized by DEP or RESD for longer duration." Condition 35., Valid Data, states in part..Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction as defined in Rule 6210.200 where emissions exceed the standards in Table 1. These excess emission periods shall be reported as required in Section II, Condition 13." CFR 60.46a(g) states in part" Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO2 and NOx for 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NOx only), or emergency conditions (SO2 only)." Bert Gianazza has raised the following questions. If , during the process of starting up, the unit experiences a malfunction, does the unit get 12 hours for startup excess emissions plus another 2 hours excess emissions for malfunction, or would the 2 hour malfunction time be included in the 12 hour startup time? 2. If JEA sees that emissions are so high that they cannot meet the 24 hour SO2 limit, can they shut the unit down prior to completeing 24 hours operation, at 11pm for example, and avoid a violation? Would we consider that "gaming the system", and not allow it? 3. In calculating compliance with the 24 hour SO2 standard, can they toss out the 2 hours or more of data during the malfunction (providing it was a bona fide malfunction) ? Notethe permit seems to indicate yes, but NSPS Subpart Da seems to say no, except for NOx. 4. Under what circumstances would RESD authorize longer than 2 hours duration for excess emissions due to malfunction? 5. For nights and weekends, how would such authorization be obtained? Please everyone put on your thinking caps, and see if we can go into this meeting with a reasonable answer to these questions. I would like to meet with the Air Section brain trust (if you are copied on this e mail, you are a brain truster) prior to the meeting with JEA, maybe sometime during January 2, to discuss this. Thanks.

12/17/2002

Mitchell, Bruce

To: Richard Robinson

Subject: RE: Meeting with JEA on Excess Emissions Issues

12/17/02

Dear Richard,

Got your message and attachment and will evaluate. Don't have an immediate response, but we will get back to you ASAP. Thanks for the heads-up on the issue...did not know that there was an issue with "excess emissions". I forwarded your note and attachment to Pat Comer, Scott Sheplak, and Trina Vielhauer for input. Take care and wishing you and staff a safe and Happy Holidays!

Bruce

-----Original Message-----

From: Richard Robinson [mailto:ROBINSON@coj.net]

Sent: Tuesday, December 17, 2002 9:28 AM

To: Mitchell, Bruce

Cc: Wayne Tutt; Arif, Syed; GianNB@jea.com

Subject: Fwd: Meeting with JEA on Excess Emissions Issues

See attached e-mail from Wayne Tutt, Compliance Supervisor, AWQD. Could you and Syed review the e-mail and give me your thoughts on the questions posed by Bert Gianazza, JEA, concerning excess emissions?

Your input would be appreciated!

Richard L. Robinson, P.E., Manager
Air Pollution Source Permitting Section
Air & Water Quality Division
City of Jacksonville, FL
117 West Duval Street, Suite 225
Jacksonville, FL 32202

Phone: (904) 630-4900

Fax: (904) 630-3638

E-Mail: robinson@coj.net

12/17/2002



December 9, 2002

Mr. Scott Sheplak, P.E.
Administrator
Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

ELECTRIC

WATER

SEWER

RE: Northside Generating Station Units 1 and 2
Permit No. 0310045-008-AV

Dear Mr. Sheplak:

In response to your incompleteness letter dated September 18, 2002, and per my conversations with Bruce Mitchell of your staff, please issue a 60-day extension for providing the required response.

This additional time is needed to address the item in your letter and provide other information required by the Department to process our application.

If you have any questions, please call me at (904) 665-6247.

Sincerely,

N. Bert Gianazza, P.E.
Environmental Services

cc: ✓ Bruce Mitchell, P.E., FDEP
Steve Pace, P.E., RESD

CERTIFIED MAIL



EV 111802

November 18, 2002

Mr. E. Frey
Florida Dept. of Environmental Regulation
7825 Baymeadows Way, Suite 200B
Jacksonville, FL 32256-7577

RE: JEA / St. Johns River Power Park (SJRPP) Units 1 & 2
COC Permit No. PA-81-13
Title V Permit No. 0310045-002-AV
Notification of Annual Performance Test and Relative Accuracy Test Audit
(RATA)

Dear Mr. Frey:

The annual performance test, for the above referenced facility, is required to be conducted as specific in the SJRPP Conditions of Certification and Title V permit.

The testing is tentatively scheduled to commence December 9, 2002, in conjunction with the RATA of the Continuous Emission Monitoring System (CEMS). In the event there is a change in the testing schedule your office shall be notified.

Please contact me at (904) 665-8729 if you have any questions.

Sincerely,

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

Jay Worley
SJRPP Group Leader, Bulk Materials

RECEIVED

NOV 20 2002

BUREAU OF AIR REGULATION

xc: H. Oven, FDEP
B. Mitchell, FDEP
W. Tutt, RESD
W. Smith, EPA

Mitchell, Bruce

To: Gianazza, N. Bert

Subject: RE: CAM Plan

8/6/02

Bert,

Thanks for the CAM Plan submittal. We will evaluate it and respond ASAP. Take care.

Bruce

-----Original Message-----

From: Gianazza, N. Bert [mailto:GianNB@jea.com]

Sent: Tuesday, August 06, 2002 9:18 AM

To: Mitchell, Bruce

Subject: FW: CAM Plan

Bruce, for your review and comment. Please call me as soon as you can regarding this. Sorry for not sending it earlier. I seem to stay behind these days.

We need to submit our application for Unit 2 this week. We went ahead and included Unit 1 in the application even though we don't have the stack test results, etc. yet for that unit. I need to talk to you about how you want to handle Unit 1.

Later, Bert 904-665-6247

-----Original Message-----

From: Goodrich, William G.

Sent: Thursday, August 01, 2002 2:43 PM

To: 'Gujjarlapudi, Ebenezer S.'

Cc: Gianazza, N. Bert

Subject: RE: CAM Plan

I did have some editorial comments and some correction of (my own) typos. Comments are in red.

<<JEA baghouse protocol.doc>>

Bill Goodrich

Phone 904-665-6604

Fax 904-665-4993

Pager 904-442-1602

-----Original Message-----

From: Gujjarlapudi, Ebenezer S. [SMTP:GujjarlapudiES@bv.com]

Sent: Thursday, August 01, 2002 8:41 AM

*8-7-02
01/11/03 Spk W
Berk - looked Ok
via Forum yesterday 01/11.
Discussion.*

8/6/2002

To: Goodrich, William G.

Cc: Gianazza, N. Bert

Subject: CAM Plan

Bill:

Please find attached the CAM Plan that incorporates changes as we discussed yesterday. I also altered some language throughout the document. Please review and let me know if you have any questions or changes.

<<JEA baghouse protocol.doc>>

If you have any questions or need any additional information, please feel free to contact me.

Regards,

Ebenezer S.Gujjarlapudi, P.E.

Environmental Engineer

Black & Veatch Corporation

10751 Deerwood Park Blvd, Suite 130

Jacksonville, FL 32256

Ph: (904) 997-7106

Fax: (904) 641-7860

<< File: JEA baghouse protocol.doc >>

Sheplak, Scott

Bruce fn:

From: Dana Brown [DLBROWN@coj.net]
Sent: Friday, April 11, 2003 5:50 PM
To: Pennington, Jim
Cc: James Manning; Tracey Arpen; Wayne Tutt; Linero, Alvaro; Sheplak, Scott; Vielhauer, Trina
Subject: Re: PSD Applicability Determinations

Scott

Jim-

One minor correction I need to make- I am not sure JEA has actually retained legal counsel - Angela or anyone else - I only know that Bert has mentioned her name several times. Today, I spoke once again with our OGC attorney raising the issue of legal representation of JEA and they have assured me that their office will not be representing JEA in this matter due to our SOA language and your concerns.

Thanks for your input today, it was very helpful. As soon as we get a draft Consent Order with Compliance Plan ready for review, I will E-mail you a copy. I will also inform JEA of 1) their need to submit the project list to DEP-Tallahassee for PSD applicability review; and, 2) that the compliance plan will be rolled into their Title V permit. I'm not sure of the time frame for issuance of the Title V permit, but I believe JEA is hoping to have these projects completed by the end of the summer.

Thanks again for your assistance.

D
>>> "Pennington, Jim" <Jim.Pennington@dep.state.fl.us> 4/11/2003 11:19:27 AM >>>
Dana,

Thanks for letting us know about the JEA Northside enforcement case. It is my understanding that you have already advised the Company to obtain outside legal counsel in compliance with the SOA and that they have retained Angela Morrison as their attorney of record. The SOA also addresses the issue of enforcement lead and at this time RESD has the lead.

As we discussed, you are preparing a Consent Order with a compliance schedule for the numerous projects that the Company needs to complete. Subsequently, this schedule will be included in the Title V permit as a compliance plan.

In order for the Company to receive assurances that PSD has not been triggered by the projects in the compliance plan, they will need to submit details to the New Source Review Section so as to be able to obtain PSD applicability determinations. Al Linero has agreed to provide staffing for the review of these projects.

Please let me know if I may be of any assistance,

Jim P.

Mitchell, Bruce

To: Gianazza, N. Bert
Cc: Sheplak, Scott
Subject: RE: Part 60 Quaterly/Semi-annual Reporting, D.60 Title V Permit

11/1/02

Bert,

To incorporate the change of the reporting frequency at 40 CFR 60.49a(i) would impose a Revision or Renewal process. However, for expediency purposes, you can request the change without permit revision pursuant to Rule 62-213.410(2), F.A.C., but there will be no permit shield available under this process. Then, upon the next opening of the permit (Revision or Renewal), we can incorporate the text change of the Subpart. If there are any questions, please give me a call at 850/413-9198. Take care.

Bruce

-----Original Message-----

From: Gianazza, N. Bert [mailto:GianNB@jea.com]
Sent: Monday, October 28, 2002 8:50 AM
To: Mitchell, Bruce
Cc: Loechelt, Mark K. - Production Assurance Leader
Subject: FW: Part 60 Quaterly/Semi-annual Reporting, D.60 Title V Permit

Bruce, can you answer Marks question below?

Tx, Bert

-----Original Message-----

From: Loechelt, Mark K. - Production Assurance Leader
Sent: Sunday, October 27, 2002 8:03 PM
To: Gianazza, N. Bert
Cc: Worley, Jay A. - Group Leader A/W Quality Production
Subject: Part 60 Quaterly/Semi-annual Reporting, D.60 Title V Permit

As I'm unable to find Bruce Mitchell's number (all are outdated) or e-mail address on FDEP, so I need your forwarding assistance. NGS/SJRPP Title V permit D.60, referencing 40 CFR 60.49a(i), states that quarterly reports are required. The new passage, indicates semi-annual. D.59 referencing opacity, did not change.

11-18-02
 @ 4:15 Mark has left the
 company - Bert said that
 he will not be pursuing this issue
 at this time. Bm
 11-1-02
 @ 3:14
 left a v.m.m for
 Mark to call me when
 he gets back into the
 office - out till the 2nd of November

11/1/2002

May I proceed with semi-annual or must I await official permit change to proceed? I'd like to commence at once, to get me on track if possible, so if you could forward to Bruce requesting his timely response I'd appreciate it !!!

Thanks, Mark
(904)665-8797

40 CFR 60.49a Reporting requirements.

(h) For the purposes of the reports required under §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under §60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.

(i) The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

[§60.49a(i) amended at 63 FR 49454, Sept. 16, 1998; 64 FR 7464, Feb. 12, 1999]

REGULATORY & ENVIRONMENTAL SERVICES DEPARTMENT

Air and Water Quality Division



August 26, 2002

Ms. Susan Hughes
Vice President
Environmental, Health, and Safety Group
Jacksonville Electric Authority
21 W. Church St., Tower 8
Jacksonville, FL 32202-3139

RECEIVED

AUG 29 2002

BUREAU OF AIR REGULATION

**RE: Initial Performance Testing Report --- Petroleum Coke Fired
JEA Northside
No. 2 Circulating Fluidized Bed (CFB) Boiler
Particulate Matter (PM and PM₁₀), Nitrogen Oxides (NO_x), Sulfur Dioxides (SO₂),
Carbon Monoxide (CO), Sulfuric Acid Mist (H₂SO₄), Lead (Pb), Fluoride (F),
Volatile Organic Compounds (VOC), and Mercury (Hg) Emissions
Permit Numbers: 031-0045-007-AC; PSD-FL-265A
Test Dates: May 20 and 21, 2002**

Dear Ms. Hughes:

This is to acknowledge receipt and review of the above captioned test report, submitted July 3, 2002. JEA Northside has fulfilled the requirements of PM, PM₁₀, NO_x, SO₂, CO, Pb, F, VOC, and Hg emissions testing as stipulated in the referenced permit for the #2 CFB Boiler.

It is noted, however, that the test of H₂SO₄ emissions does not demonstrate compliance for the following reason:

The average emission rate was 3.13 lbs. per hour, as opposed to the permitted allowable of 1.1 lbs. per hour.

This report is being referred to the Air and Water Quality Division's (AWQD) Enforcement activity for possible action. JEA will be contacted in the near future regarding this issue. Be advised that continued operation of this source will constitute a violation of permit conditions for each day of operation until a satisfactory retest is performed.

It is understood that the H₂SO₄ retest conducted on June 16th also failed to demonstrate compliance. That test report was due to be submitted to our office for review on or before July 31st, and is now past due. Please submit said report at the earliest possible opportunity. The H₂SO₄ retest conducted July 25th is due to be submitted to our office on or before September 8th.

Ms. Susan Hughes
Jacksonville Electric Authority
Page 2

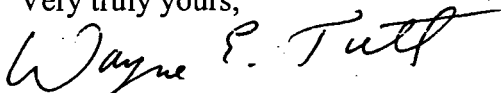
Additionally, it is noted that PM testing of this emission unit was conducted via 60-minute test runs and 30 DSCF sample volumes, as opposed to the 120-minute test run and 60 DSCF sample volume requirements of NSPS Subpart Da, 40 CFR 60.48a(b)(2)(i). It is understood from a phone conversation with Mr. Syed Arif that FDEP, with agreement from EPA Region IV, has granted JEA Northside relief from the PM testing requirements of NSPS Subpart Da because the BACT-determined PM limit of 0.011 lbs/MMBtu is more stringent than the 0.03 lbs/MMBtu limit of Subpart Da. In granting this relief, it is understood that Mr. David McNeal of EPA Region IV expressed an opinion that as long as the PM catch (probe wash + filter weight) averaged at least 50 milligrams (mgs), that would provide enough of a sample to determine compliance, and there would be no need to perform the 2-hour test runs required by Subpart Da.

It is noted that the three 60-minute sampling runs of May 20, 2002 produced PM catches of 10.1, 13.9, and 11.6 mgs., for an average of ~ 12 mgs. Additionally, the June 29, 2002 coal-fired PM testing of unit No. 2, which was recently submitted for review, produced PM catches of 7.9, 4.0, and 6.3 mgs., for an average of ~ 6 mgs.

Because neither of the first two PM tests of unit No. 2 has achieved the 50 mgs. criteria suggested by EPA Region IV, AWQD believes JEA Northside should conduct 2-hour, 60 DSCF PM test runs, as per Subpart Da, for all future compliance testing of units No. 1 and No. 2. The increased sample time/volume would provide better assurance that the two CFB boilers are meeting the permitted PM emission limit of 0.011 lbs/MMBtu. Because this may require modifying JEA's permit to reflect compliance based on a six-hour average, rather than the currently stated three-hour average, AWQD is forwarding copies of this letter to FDEP and EPA Region IV for review and possible permitting action.

If there are any questions concerning these matters, please contact Mr. Wayne Walker at 630-1212 ext. 3164.

Very truly yours,



Wayne E. Tutt, QEP
Environmental Program Supervisor

WET/WLW/vgw

c: Mr. David McNeal, EPA Region IV
Mr. Syed Arif, FDEP
Mr. Bruce Mitchell, FDEP
Ms. Dana B. Brown, Environmental Enforcement Administrator, AWQD
AWQD File 0045 B

Mitchell, Bruce

From: Gianazza, N. Bert [GianNB@jea.com]

Sent: Friday, May 31, 2002 9:48 AM

To: Linero, Alvaro; Mitchell, Bruce; Cascio, Tom; Kirts, Christopher; Costello, Martin; Kahn, Joseph; Gay, John; Costello, Martin; Banks, Richard; Steve Pace; Arif, Syed; Wayne Tutt; Wayne Walker

Subject: Northside Repowering Update

Fyi. This was released yesterday (Thursday, May 30).

Northside Repowering Project Update

Northside Unit 1 came on line at approximately 11 a.m. Wednesday, May 29, burning solid fuel for the first time in its history. This is the second of our electric generating units to be converted from conventional gas/oil fuel operation to the new Circulating Fluidized Bed boiler clean coal technology that burns coal and/or petroleum coke. Unit 3 came on line early this morning, marking the first time since 1982 that all of Northside's three units have been on line simultaneously. Today, Northside 1 and 2 are each capable of producing approximately 300 MW of power.

ENV 122101

CERTIFIED MAIL



RECEIVED

DEC 26 2001

BUREAU OF AIR REGULATION

December 21, 2001

Al Linero, P.E.
Division of Air Resources Management
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

RE: St. Johns River Power Park (SJRPP), Site Certification No. PA-81-13
PSD Permit No. PSD-FL-010; Title V Permit No. 0310045-002-AV
Burner Component Replacement Project

Dear Mr. Linero:

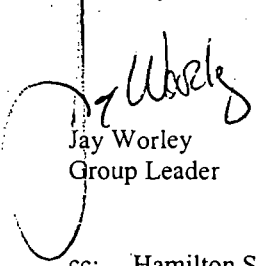
In an effort to reduce nitrogen oxides (NOx) emissions from the St. Johns River Power Park's two steam generating units, SJRPP plans to replace some of the existing burner components with new ones using state-of-the-art designs. With the burner component replacements, both NOx and carbon monoxide (CO) emissions will be reduced. The first phase of this project is planned for the first quarter of 2002, followed by a second phase in 2003 and the final phase in 2004. Because this is a replacement project resulting in reduced emissions, no permit or permit revision is necessary.

The two 660 MW coal-fired steam generating units began operating in 1986 and 1988 respectively. The Prevention of Significant Deterioration permit and Conditions of Certification limited NOx emissions to 0.60 pounds per million British thermal units (lb/mmBtu) on a 30-day rolling average basis while firing solid fuel. Through an early election under the federal Acid Rain Program, the units' annual average NOx emissions were subsequently limited to 0.50 lb/mmBtu beginning on January 1, 1997. This limit will remain in effect only through January 1, 2008, at which time a much lower annual average NOx limit will be imposed. In anticipation of the lower NOx limit, SJRPP is planning the above-mentioned burner component replacements starting early next year.

Initially SJRPP will replace components on eight of Unit No. 2's twenty-eight existing burners during the Spring 2002 outage to ensure that the equipment operates as efficiently and as effectively as planned before making a further investment in this technology. Assuming that the NOx and CO reductions are as expected, and based on scheduled unit outages, the components on all of the Unit No. 1 burners would be replaced in 2003, followed by completion of the Unit No. 2 component replacements in 2004.

If you need any additional information or have any questions, please contact me at (904) 751-8729

Sincerely,


Jay Worley
Group Leader

cc: Hamilton S. Owen, DEP Siting
Chris Kirts, DEP NE District
Jim Manning, RESD

Scott 12/27
All - Al
has original -
Bruce fu: 1 atty
Scott 12/28

Attachment NGS: CT Heat Input Nominal Values

NORTHSIDE STATION COMBUSTION TURBINES
BASE LOAD MW vs TEMPERATURE

#	AMBIENT TEMP *F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR	AMBIENT TEMP *F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR
1	20	67.97	67.63	868	60	58.77	58.43	747
2	21	67.74	67.40	865	61	58.54	58.20	744
3	22	67.51	67.17	861	62	58.31	57.97	741
4	23	67.28	66.94	858	63	58.08	57.74	738
5	24	67.05	66.71	855	64	57.85	57.51	735
6	25	66.82	66.48	852	65	57.62	57.28	733
7	26	66.59	66.25	849	66	57.39	57.05	730
8	27	66.36	66.02	846	67	57.16	56.82	727
9	28	66.13	65.79	842	68	56.93	56.59	724
10	29	65.90	65.56	839	69	56.70	56.36	721
11	30	65.67	65.33	836	70	56.47	56.13	719
12	31	65.44	65.10	833	71	56.24	55.90	716
13	32	65.21	64.87	830	72	56.01	55.67	713
14	33	64.98	64.64	827	73	55.78	55.44	710
15	34	64.75	64.41	824	74	55.55	55.21	708
16	35	64.52	64.18	821	75	55.32	54.98	705
17	36	64.29	63.95	818	76	55.09	54.75	702
18	37	64.06	63.72	815	77	54.86	54.52	699
19	38	63.83	63.49	812	78	54.63	54.29	697
20	39	63.60	63.26	809	79	54.40	54.06	694
21	40	63.37	63.03	806	80	54.17	53.83	691
22	41	63.14	62.80	802	81	53.94	53.60	689
23	42	62.91	62.57	799	82	53.71	53.37	686
24	43	62.68	62.34	796	83	53.48	53.14	683
25	44	62.45	62.11	793	84	53.25	52.91	681
26	45	62.22	61.88	791	85	53.02	52.68	678
27	46	61.99	61.65	788	86	52.79	52.45	675
28	47	61.76	61.42	785	87	52.56	52.22	673
29	48	61.53	61.19	782	88	52.33	51.99	670
30	49	61.30	60.95	779	89	52.10	51.76	667
31	50	61.07	60.73	776	90	51.87	51.53	665
32	51	60.84	60.50	773	91	51.64	51.30	662
33	52	60.61	60.27	770	92	51.41	51.07	660
34	53	60.38	60.04	767	93	51.18	50.84	657
35	54	60.15	59.81	764	94	50.95	50.61	654
36	55	59.92	59.58	761	95	50.72	50.38	652
37	56	59.69	59.35	758	96	50.49	50.15	649
38	57	59.46	59.12	755	97	50.26	49.92	647
39	58	59.23	58.89	753	98	50.03	49.69	644
40	59	59.00	58.66	750	99	49.80	49.46	641
41	60	58.77	58.43	747	100	49.57	49.23	639

KSCT
Y INTERCEPT 72.576
SLOPE 0.2301

DISPATCH HEAT RATE CURVES

A = 1.78910E+02
B = 8.82453E+00
C = -1.50705E-02
D = 5.20028E-04
AA = 3.40192E-01
BB = 9.99987E-01
CC = 1.79499E-07
DATE: 05/21/93

Attachment SJRPP: Material Handling Transfer Points

SJRPP Material Handling Transfer Points for Permitting

<u>Limestone</u>	<u>Points</u>	<u>Coal-Shipunloader</u>	<u>Points</u>
1) Limestone receiving bin with 3 Unloading hoppers	1	14) Bucket to Hopper (grab & dump)	2
2) Unloading hoppers to FLD-1 Belt	3	15) Hopper to Belt	1
3) FLD-1 to L0	1	16) Hopper Belt to CT1	1
4) L0 to L1	1	17) CT1 to CT2	1
5) L1 to L2	1	18) CT2 to CT3	1
6) L2 to Storage Pile	1	19) CT3 to CT4	1
7) Reclaim hopper	1	20) Reclaimer to CT4 (grab, dump, dump)	3
8) Hopper to 9LC-02	1	21) CT4 to CT5	1
9) 9LC-02 to Silos(2)	2	CT4 to S1 traveling conveyor	1
10) Silos to 1LC-01, 2LC-01 (to ball mills)	2	S1 Traveling conv. to S2 boom conv.	1
Total	14	S2 boom conv to storage pile	1
		22) CT5 to C2	1
		23) CT6 to CT4	1
		Total	16
<u>Coal-Yard</u>		<u>Coal-Petcoke Feeder System</u>	
1) Receiving bin with 4 Unloading hoppers	1	24) Hopper	1
2) 4 Unloading hoppers to FCD-1,2,3,4	4	Hopper to SPC-1	1
3) FCD-1,2,3,4 to CO	4	SPC-1 to FC-1	1
4) CO to C1	1	FC-1 to C4	1
5) C1 to C2	1	Total	4
C1 to emergency stackout	1		
6) C2 to C4	1	<u>Fly & Bottom Ash Handling System</u>	
7) C4 to C5	1	25) Flyash	
C4 to CT6	1	U#1-A&B Saleable silo Baghouse (2)	
8) C5 to C6	1	& roof vents (2)	4
9) C6 to storage pile	1	U#1-1 Non-saleable Silo Baghouse	
Reclaim to C6 (grab and dump)	2	& roof vent	2
C6 to C4	1	U#1-A loadout Silo discharge (2)	
10) Surge Bins		& roof vent (1)	3
C2 to Surge Bin	1	U#1-B loadout Silo discharge (2)	
C3 to Surge Bin	1	& roof vent (1)	3
C4 to Surge Bin	1	U#2-A&B Saleable silo Baghouse (2)	
Surge Bin to FCR-A,B	2	& roof vents (2)	4
11) FCR-A,B to Crushers (2)	2	U#2-A Non-saleable Silo Baghouse	
Crushers (2)	2	& roof vent	2
Crushers to C7,8	2	U#2-A loadout Silo discharge (2)	
12) C7,8 to C9,10	2	& roof vent (1)	3
13) C9,10 to 14 Coal Storage Silos	14	U#2-B loadout Silo discharge (2)	
Total	47	& roof vent (1)	3
		26) Bottom Ash	
		U#1-A&B Silo to conveyor belt	2
		Conveyor belt to truck	1
		U#2-A&B Silo to conveyor belt	2
		Conveyor belt to truck	1
		Total	30
		Grand Total	111