



Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

November 27, 2006

L-2006-258  
10 CFR 50.36.b  
EPP 3.2.4

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

RE: St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
Environmental Protection Plan Report  
Request for Minor Revision to Industrial Wastewater Facility Permit

The attached request for a minor revision to the Industrial Wastewater Facility Permit is being submitted pursuant to the requirements of Section 3.2.4 of the St. Lucie Units 1 and 2 Environmental Protection Plans.

Please contact Ken Frehafer at (772) 467-7748 if there are any questions on this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Gordon L. Johnston', written over a large, stylized circular flourish.

Gordon L. Johnston  
Site Vice President  
St. Lucie Plant

GLJ/KWF

Attachment

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
Environmental Protection Plan Report  
Approved Minor Revision to Industrial Wastewater Facility Permit

L-2006-258  
Attachment  
Page 1 of 11



Florida Power & Light Company, 6351 South Ocean Drive, Jensen Beach FL. 34957

November 27, 2006

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
7006 0100 000 9587 0443

Marc Harris, P.E.  
Supervisor, Power Plant NPDES Permitting  
Industrial Wastewater Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 3545  
Tallahassee, Florida 32399-2400

RE: FPL - St. Lucie Plant  
State IWW Permit No. FL0002208  
Request for Minor Revision Due to Minor Modification of Facility

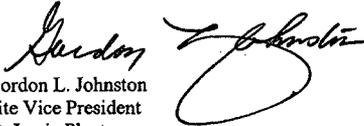
Dear Mr. Harris:

Attached please find the following items to support the request for minor revisions to the Florida Power & Light Company (FPL) St. Lucie Plant State IWW Permit No. FL0002208:

- 1) Four (4) signed, sealed copies of FDEP Form 62-620.910(9), "Application for a Minor Revision to a Wastewater facility of Activity Permit including Attachment 1 - Description of Proposed Minor Plant Modification Necessitating Minor Permit revision with Figures and Appendices.
- 2) An FPL Check (Check No, 1060893) payable to the Florida Department of Environmental protection for the \$250 application fee.

If you have any questions or need additional information on this matter, please contact Ron Hix at (561) 691-7641.

Sincerely,

  
Gordon L. Johnston  
Site Vice President  
St. Lucie Plant

Enclosure  
Vppsl036

cc:  
USNRC Document Control Desk  
FDEP - SE District - Tim Powell

an FPL Group company



## APPLICATION FOR A MINOR REVISION TO A WASTEWATER FACILITY OR ACTIVITY PERMIT

### 1. Instructions

- a. In accordance with Rule 62-620.325, F.A.C., this form must be submitted to the appropriate Department district office or approved local program when requests for minor revisions to a permit or minor modifications to a facility are made by a permittee, except for transfer of a permit to a new permittee and addition of a major user of reclaimed water to a Part III reuse system. Application for transfer of a permit to a new permittee shall be made on DEP Form 62-620.910(11). Application for addition of a major user of reclaimed water shall be made on DEP Form 62-610.300(4)(a)1.
- b. Each applicable item must be completed in full in order to avoid delay in processing of this form. Where attached sheets or other technical documentation are provided, indicate appropriate cross-references.
- c. Three (3) copies of this application with supporting documentation shall be submitted with this form.
- d. All information is to be typed or printed in ink. Dates are to be entered in MM/DD/YR format.
- e. This application and attachments shall be signed in accordance with Rule 62-620.305, F.A.C. Also, as applicable, this application and all attachments shall be signed and sealed by a professional engineer registered in Florida in accordance with Rule 62-620.310, F.A.C.

### 2. Facility Information

- a. Permit Number: FL0002208      b. Facility Identification Number: FL0002208
- c. Project/Facility Name: FPL - St. Lucie Power Plant
- d. Contact Name: Ron Hix
- Number and Street: 700 Universe Boulevard
- City/State/Zip Code: Juno Beach, Florida 33408
- Telephone: (561) 691-7641

### 3. Type of Revision

- Correct Typographical Errors<sup>1</sup>** - Submit one copy of each page of the permit showing revisions being requested.
- Change Improvement Schedule<sup>1</sup>** - Provide a description of the improvement, a list of the dates to be revised, and a reason for the proposed change in each date.
- Change Expiration Date of Permit<sup>1</sup>** - Provide the current and proposed expiration dates for the permit and the reasons for the proposed change.
- Change Staffing Requirements<sup>2</sup>** - Describe the proposed change and submit justification for the change in accordance with Chapter 62-699, F.A.C.

<sup>1</sup>A processing fee is not required.  
<sup>2</sup>A processing fee is required with the application in accordance with Rule 62-4.050, F.A.C.

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
Environmental Protection Plan Report  
Approved Minor Revision to Industrial Wastewater Facility Permit

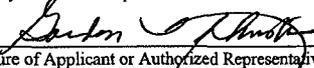
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- Change Monitoring and Reporting Requirements<sup>2</sup>** - Describe the proposed change and submit justification for the change in accordance with Chapter 62-601, F.A.C.
- Modify Approved Pretreatment Program<sup>1</sup>** - Describe the proposed modification and provide the information required by Rule 62-625.540, F.A.C.
- Delete Point Source Outfall<sup>1</sup>** - Identify the outfall and explain why the outfall is being eliminated.
- Modify or Expand Approved Residuals Land Application Sites<sup>2</sup>** - Attach a new or updated Agricultural Use or Dedicated Site Plan as required by Chapter 62-640, F.A.C.
- Minor Modification to the Facility<sup>2</sup>** - Provide a description of the proposed modification. If applicable, attach any reports, plans, and specifications which have been developed to implement this modification.
- Other<sup>2</sup>** - Provide appropriate documentation. Describe.

4. Certifications

a. Applicant or Authorized Representative

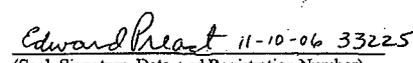
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

      NOVEMBER 27, 2006  
(Signature of Applicant or Authorized Representative<sup>3</sup>)      (Date)

Name (please type) Gordon Johnston      Company Name FPL  
Title Vice President, St. Lucie Plant      Company Address: 6451 S. Ocean Drive  
Phone: (772) 467-7100      City/State/Zip Code: Jensen Beach, Florida 34957

b. Professional Engineer Registered in Florida

I certify that the engineering features of this project have been (~~designed~~) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgement, this facility, when properly constructed, operated, and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department.

Name (please type): Ed Preast  
Florida Registration Number: 33225  
Company Name: FPL  
Company Address: 700 Universe Boulevard  
City/State/Zip Code: Juno Beach, Florida 33408  
Phone Number: 561-691-2679       11-10-06 33225  
(Seal, Signature, Date, and Registration Number)

<sup>3</sup>If signed by the authorized representative, attach a letter of authorization in accordance Rule 62-620.305, F.A.C.

## Attachment 1

### Description of Proposed Changes to Monitoring and Reporting Requirements and Addendums/Clarification to State IWW Permit Application

#### General Description of St. Lucie Plant:

The Florida Power and Light Company (FPL) St. Lucie Nuclear Plant is located on Hutchinson Island, between Jensen Beach and Ft. Pierce, Florida. Unit 1 has been in service since 1976, with Unit 2 commencing operation in 1983.

The St. Lucie Plant State IWW Permit No. FL0002208 was most recently renewed on January 20, 2006. Since the renewed permit was received, FPL, via operation under the permit and through the environmental auditing process, has identified three (3) areas in which the permit needs to be revised.

#### Item 1) Request to Change Monitoring and Reporting Requirements

Specific Condition I.A.1. of the St. Lucie Plant IWW permit requires "Discharge Water Temperature" and "Temperature Differences Between Intake and Discharge" (Delta T) to be monitored "Hourly". This information is collected on an hourly basis, manually, and delta T's calculated, from digital read-outs located in the St. Lucie Plant control room by the facility's "Reactor Operators" (ROs). The primary responsibility of the ROs is the operation of the plant's nuclear reactors, a highly demanding job. In order to allow more time for the ROs to conduct their primary job, and to be more in line with (although more frequent than) the requirements for all other FPL facilities that have temperature reporting requirements (i.e.; "6/day"), FPL is requesting that the monitoring frequency for these parameters be reduced from hourly to "Every 3 Hours" or "8/day". FPL believes this reduction can be made without sacrificing the quality of the data currently being reported. This frequency coincides with other data collecting requirements the ROs currently have.

#### Justification for Change to Monitoring and reporting requirements:

To justify this change in monitoring and reporting, FPL looked carefully at one year of discharge temperature data that were collected and reported from September, 2005 through August, 2006 (Appendix 1). Here, FPL compared maximum monthly discharge temperatures and Delta T's based on hourly temperature readings, with maximum monthly discharge temperatures and Delta T's using water temperatures from the same data set, for every third, fourth, and sixth hour. The data from every third hour (3-hour) correlated most favorably with the hourly data.

For the maximum hourly versus 3-hour maximum temperature, 8 of the 12 (67%) of the monthly maximums were identical. The maximum difference for any single month was 0.2°F. Since FPL reports whole numbers on the monthly DMRs, none of the values reported during this time frame would have been different (i.e.; 100% the same) had we been using the "3-hour" maximum temperature.

For the maximum hourly versus 3-hour Delta T, 10 of the 12 (83%) of the monthly delta T's were the same. The maximum difference for one month was 0.7°F and the only other month not the same had a difference of 0.2°F. Thus had we been using the "3-hour Delta T" during this time frame and rounding the numbers for the DMRs, only one value reported (July 2006) would have changed by one degree Fahrenheit.

This information, along with the facts that:

- 1) The nuclear plants are "base-loaded" so any changes in operation (i.e.; start-ups, shutdowns, load changes) occur infrequently. Therefore, significant changes in the thermal output and their resulting changes in discharge temperature due to operational changes from the facility are relatively infrequent.
- 2) The intake is located at mid-depth and off-shore in the Atlantic Ocean so changes in the intake water temperature, which effects both types of monitoring, are generally gradual;

seem to indicate that the 3-hour monitoring will, in most all cases, lead to the same, or very close to the same, maximum reported temperatures and Delta T's as the hourly monitoring currently being conducted.

Item 2 – Addendum to St. Lucie Plant IWW Permit Application

During an internal audit conducted recently of the St. Lucie Plant's Environmental Compliance Program, it was discovered that a source of wastewater to the on-site "Evaporation and Percolation (E/P) Basins" was inadvertently omitted. The omitted source was laboratory waste streams from the facility's on-site "secondary" laboratory. The secondary laboratory on the site deals with the plant's "secondary" non-radiological systems (i.e.; testing and analyses, both wet chemistry and on-line samplers, of non-radiological wastes steams) and monitors virtually the same operational processes as those monitored in the laboratories of FPL fossil-fueled plants. (Note: The "radio-chemistry" labs, which handle radioactive laboratory wastes – from the "primary" side of the plant- are routed to OSN – I-003 – Liquid Rad Waste System). According to 40 CFR 423.11(b), laboratory waste is a "low volume waste" and can be commingled with the other low volume wastes such as stormwater or plant wash water that also discharge to these E/P basins. The average daily volume of lab waste discharged to the E/P basins (in particular the East Basin), is approximately 5,000 gallons. Please note that most of the 5,000 gallons consists of on-line instrument process water flow, not actual laboratory analytical waste. This volume is minor compared to storm and wash water from floor drains and other low volume waste sources that are discharged to the E/P basins. As noted in the previous application, the E/P basins have a combined minimum operating capacity of approximately 27,000,000 gallons and only occasionally discharge to the plant's intake canal via OSN I-008. Also, because these laboratory waste steams have always discharged to the E/P basins, the wastes have been "accounted for" in the sampling and analyses conducted for Form 2GS (West Pond) and Form 2CS at OSN I-008 for the most recent State IWW Permit application and subsequent toxicity testing.

Appendix 2 is a revised "Item IVA Attachment" from the previous State IWW Permit Application with the lab wastes included.

Item 3 – Addition of Well Sampling Purge Water to OSN I-003, Liquid Radwaste System Batch Releases:

Historically, the St. Lucie Plant has had releases of turbine lube oil, diesel fuel and solvents to the ground on the plant property. The sites of these spills are in various stages of remediation with groundwater monitoring required by the FDEP at each of the contaminated sites. Prior to collecting samples from the groundwater monitoring wells, the wells must be purged. This purge water is typically collected in 50 gallon drums and disposed of offsite in an approved manner. More recently, FPL became aware that due to some other past releases, there is a small concentration of tritium present in some of these monitoring wells. In order to facilitate accounting for the amount of radioactive material released from the site, FPL believes it is prudent to release this purge water through outfall OSN I-003, Liquid Radwaste System Batch releases. To accomplish this, the drums of purge water would be moved into the Reactor Auxiliary Building (RAB) and the purge water added to the Liquid Radwaste System. This water would then be intermingled with other wastestreams in a holding tank for batch release and eventually discharged to the plant's discharge canal via OSN I-003.

Please note that the maximum volume of purge water collected annually from the monitoring well sampling events will be less than 600 gallons.

Appendices 3, 4, and 5 present expected impacts to water quality at the facility's POD (OSN – D-001) if these wastes were discharged via OSN I-003.

Appendix 2 is a revised "Item IVA Attachment" from the previous State IWW Permit Application with the groundwater monitoring well sampling purge water included.

FPL respectfully requests that these releases of groundwater monitoring well purge water be approved and included in State IWW Permit FL0002208.

**Appendix 1**  
**FPL - St. Lucie Plant**  
**Comparison of Recorded Temperatures (°F)**  
**September 2005 - August 2006**

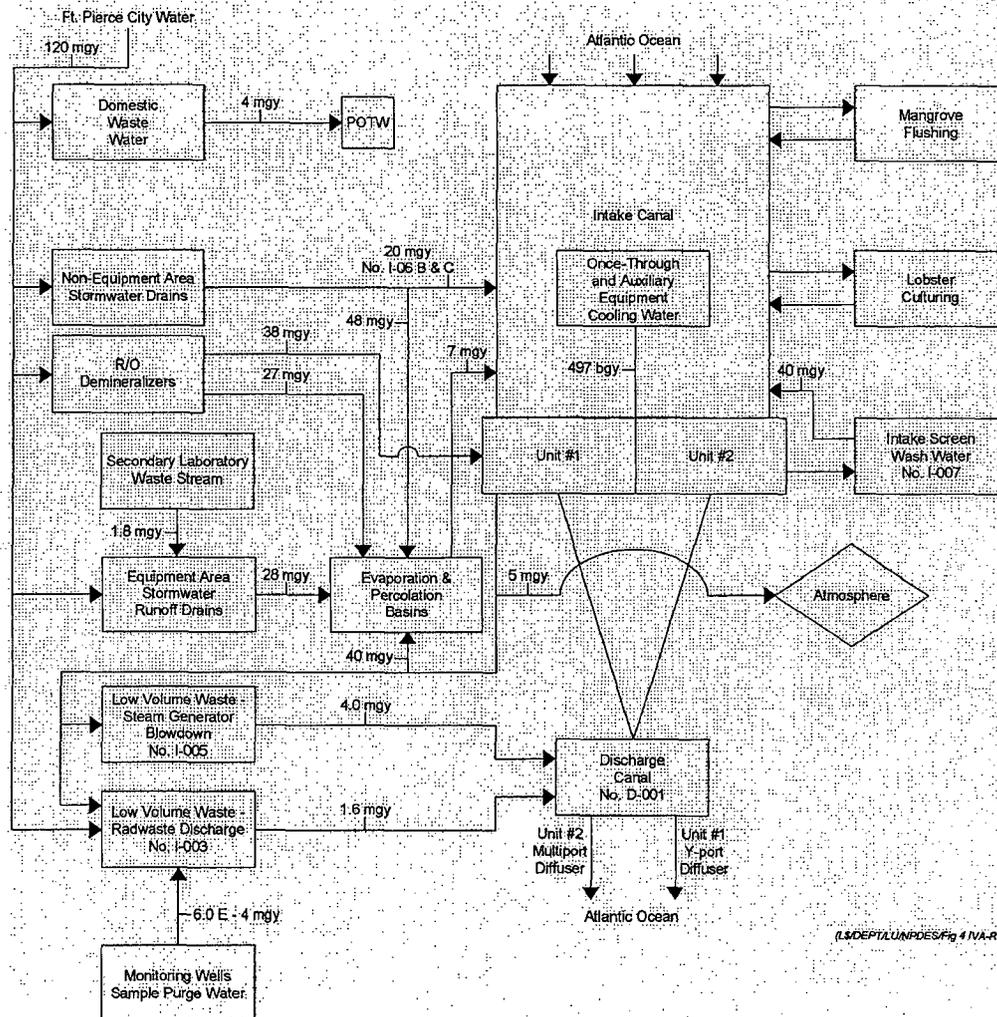
Month	Intake Temp	Hourly Max Disc Temp	3-Hour Max Temp	3-Hour Difference	4-Hour Max Temp	4-Hour Difference	6-Hour Max Temp	6-Hour Difference
September	85.8	111.0	111.0	0.0	111.0	0.0	111.0	0.0
October	85.5	110.5	110.5	0.0	110.5	0.0	110.5	0.0
November	77.7	99.8	99.8	0.0	99.6	0.2	99.6	0.2
December	74.5	94.4	94.4	0.0	94.3	0.1	94.4	0.0
January	73.0	95.4	95.2	0.2	95.2	0.2	95.2	0.2
February	72.3	95.1	95.1	0.0	95.0	0.1	95.1	0.0
March	75.0	96.1	96.1	0.0	96.1	0.0	96.1	0.0
April	76.0	99.6	99.6	0.0	99.4	0.2	99.6	0.0
May	80.0	102.1	101.9	0.2	101.9	0.2	101.9	0.2
June	84.0	108.8	108.6	0.2	108.8	0.0	108.2	0.6
July	84.0	108.7	108.7	0.0	108.5	0.2	108.7	0.0
August	83.1	106.4	106.2	0.2	106.0	0.4	105.9	0.5
Ave Diff				0.1		0.1		0.1
Max Diff				0.2		0.4		0.6
% 0's				67%		33%		58%

Month	Hourly Max Delta T	3-Hour Max Delta T	3-Hour Difference	4-Hour Max Delta T	4-Hour Difference	6-Hour Max Delta T	6-Hour Difference
September	26.5	26.5	0.00	26.5	0.0	26.2	0.3
October	26.5	26.5	0.00	26.5	0.0	26.5	0.0
November	25.0	25.0	0.00	25.0	0.0	25.0	0.0
December	24.0	24.0	0.00	23.0	1.0	24.0	0.0
January	24.7	24.7	0.00	24.7	0.0	24.7	0.0
February	24.3	24.3	0.00	24.2	0.1	24.2	0.1
March	23.3	23.3	0.00	23.3	0.0	23.0	0.3
April	23.8	23.6	0.20	23.4	0.4	23.6	0.2
May	23.0	23.0	0.00	22.6	0.4	23.0	0.0
June	26.2	26.2	0.00	26.2	0.0	26.2	0.0
July	26.0	25.3	0.70	25.3	0.7	25.3	0.7
August	26.3	26.3	0.00	26.3	0.0	26.3	0.0
Ave Diff			0.1		0.2		0.1
Max Diff			0.7		1.0		0.7
% 0's			83%		58%		58%

ITEM IVA ATTACHMENT

FPL ST. LUCIE PLANT INDUSTRIAL WASTEWATER PROCESS FLOW DIAGRAM

(Estimated Flows Based on 2003 Process Data and Average Rainfall)



**Appendix 3  
FPL - St. Lucie Plant**

**Turbine Lube Oil Area Clean-up - Groundwater Monitoring Well Purge Water Analyses**

Parameter	Units	Class III Marine Standard	Unit 1 Wells				Unit 2 Wells		
			MW001	MW002	MW003	MW004	MW001	MW002	MW003
Arsenic (total)	ug/l	< 50	66	74	< 4.8	16	13	9.2	5.7
1-Methylnaphtalene	ug/l	No Criteria	< 0.074	< 0.077	< 0.86	< 0.076	0.29	< 0.076	< 0.075
2-Methylnaphtalene	ug/l	No Criteria	< 0.055	< 0.057	< 0.51	< 0.075	0.29	< 0.056	< 0.056
Acenaphthene	ug/l	No Criteria	0.096	0.09	< 0.51	< 0.091	< 0.091	< 0.12	< 0.091
Naphthalene	ug/l	No Criteria	< 0.125	< 0.125	0.54	< 0.074	< 0.073	< 0.12	< 0.073
Fluoranthene	ug/l	No Criteria	0.07	< 0.055	< 0.055	< 0.056	< 0.056	< 0.056	< 0.056
Phenanthrene	ug/l	No Criteria	0.0626	< 0.094	< 0.2	< 0.092	< 0.092	< 0.093	< 0.092
Pyrene	ug/l	No Criteria	0.0626	< 0.094	< 0.091	< 0.092	0.092	< 0.093	< 0.092
TRPH (FL PRO)	mg/l	5	2.7	0.26	< 0.41	0.67	0.67	0.72	0.17

Yellow Shading Denotes Highest Value Observed for Each Parameter

**Summary of Calculated Discharge Concentrations After Mixing in Discharge Canal Prior to Discharge to Waters of the US**

Parameter	Units		Intake*	Discharge Flow	Drum Flow***	Total Flow	Calculated Discharge
			Background	(GPM)	(GPM)	(GPM)	Concentration
Arsenic (total)	ug/l	<	23.0	472,917	50	472,967	23.01
1-Methylnaphtalene	ug/l		Not Analyzed**	472,917	50	472,967	--
2-Methylnaphtalene	ug/l		Not Analyzed**	472,917	50	472,967	--
Acenaphthene	ug/l	<	1.0	472,917	50	472,967	1.00
Naphthalene	ug/l	<	1.0	472,917	50	472,967	1.00
Fluoranthene	ug/l	<	1.0	472,917	50	472,967	1.00
Phenanthrene	ug/l	<	1.0	472,917	50	472,967	1.00
Pyrene	ug/l	<	1.0	472,917	50	472,967	1.00
Oil and Grease	mg/l	<	1.7	472,917	50	472,967	1.70

\* Intake background values from 2004 State IWW Permit Application

\*\* Not one of 126 Priority Pollutants required for NPDES Application - not anticipated to be present in ocean water

\*\*\* Maximum of drums per year - 8 (400 gallons)

**Assumptions for Calculations:** One Unit Operating - Discharge Canal Flow - 472,917 GPM  
 Drum Emptied in 1 Minute - 50 GPM  
 Concentrations from Wells are Maximum Concentrations Observed in One year of Sampling  
 If observed value is "less than" (<) MDL - The MDL value is used in the calculation  
 Calculation assumes no mixing with other waste streams from OSN I-005

**Appendix 4  
FPL - St. Lucie Plant**

**Diesel Fuel Area Clean-up - Groundwater Monitoring Well Purge Water Analyses**

Parameter	Units	Class III Wells				
		Marine STD.	MW-3	MW-11	MW23	MW-26
Benzene	ug/l	< 71.28	< 1	< 1	Not Sampled	< 1
Toluene	ug/l	No Criteria	< 1	< 1	Not Sampled	< 1
Ethylbenzene	ug/l	No Criteria	< 1	< 1	Not Sampled	< 1
Total Xylenes	ug/l	No Criteria	< 0.98	< 1	Not Sampled	< 1
MTBE	ug/l	No Criteria	< 1	< 1	Not Sampled	< 1
Naphthalene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
1-Methyl-naphthalene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
2-Methyl-naphthalene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Acenaphthalene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Fluoranthene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Phenanthrene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Anthracene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Benzo(a) Anthracene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Benzo(a) Pyrene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10
Indeno (1,2,3-cd) Pyrene	ug/l	No Criteria	< 10	< 10	Not Sampled	< 10

Yellow Shading Denotes Highest Value Observed for Each Parameter

**Summary of Calculated Discharge Concentration After Mixing in Discharge Canal Prior to Discharge to Waters of the US**

Parameter	Units	Intake	Discharge Flow	Drum Flow***	Total Flow	Calculated Discharge
		Background*	(GPM)	(GPM)	(GPM)	Concentration
Benzene	ug/l	< 1	472,917	50	472,967	1.00
Toluene	ug/l	< 1	472,917	50	472,967	1.00
Ethylbenzene	ug/l	< 1	472,917	50	472,967	1.00
Total Xylenes	ug/l	Not Analyzed**	472,917	50	472,967	--
MTBE	ug/l	Not Analyzed	472,917	50	472,967	--
Naphthalene	ug/l	< 1	472,917	50	472,967	1.00
1-Methyl-naphthalene	ug/l	Not Analyzed	472,917	50	472,967	--
2-Methyl-naphthalene	ug/l	Not Analyzed	472,917	50	472,967	--
Acenaphthalene	ug/l	< 1	472,917	50	472,967	1.00
Fluoranthene	ug/l	< 1	472,917	50	472,967	1.00
Phenanthrene	ug/l	< 1	472,917	50	472,967	1.00
Anthracene	ug/l	< 1	472,917	50	472,967	1.00
Benzo(a) Anthracene	ug/l	< 0.2	472,917	50	472,967	0.20
Benzo(a) Pyrene	ug/l	< 0.2	472,917	50	472,967	0.20
Indeno (1,2,3-cd) Pyrene	ug/l	< 0.2	472,917	50	472,967	0.20

\* Intake Background Values from 2004 State IWW Permit Application

\*\* Not one of 126 Priority Pollutants required for NPDES Application - Not Anticipated to Be Present in Ocean Water

\*\*\* Maximum Number of Drums per Year - 2 (100 gallons)

**Assumptions for Calculations:**

One Unit Operating - Discharge Canal Flow - 472,917 GPM - Drum Emptied in 1 Minute - 50 GPM  
 Concentrations from Wells are Maximum Concentrations Observed in One year of Sampling  
 If observed value is "less than" (<) MDL - The MDL value is used in the calculation  
 Calculation assumes no mixing with other waste streams from OSN I-005

**Appendix 5**  
**FPL - St. Lucie Plant**

**Mixed Plume Area Clean-up - Groundwater Monitoring Well Purge Water Analyses**

Parameter	Units	Class III Wells				
		Marine STD.	MW-3	MW-7A	MW-11	MW-12
CIS -1,2-Dichloroethene	ug/l	No Criteria	Not Analyzed	26	Not Analyzed	11
Trans-1,2-Dichloroethene	ug/l	No Criteria	Not Analyzed	1.6	Not Analyzed	3.2
Vinyl Chloride	ug/l	No Criteria	Not Analyzed	2.9	Not Analyzed	13
1,1-Dichloroethane	ug/l	No Criteria	Not Analyzed	1.6	Not Analyzed	5
Benzene	ug/l	< 71.28	< 0.27	< 5	< 0.27	< 5
MTBE	ug/l	No Criteria	22	5	0.88	5
Tetrachloroethene	ug/l	< 8.85	Not Analyzed	5	Not Analyzed	5

Yellow Shading Represents Maximum Values from 4 Wells over a 3 Year Period (2004-06)

**Summary of Calculated Discharge Concentrations After Mixing in Discharge Canal Prior to Discharge to Waters of US**

Parameter	Units	Intake	Discharge Flow	Drum Flow***	Total Flow	Calculated Discharge
		Background*	(GPM)	(GPM)	(GPM)	Concentration
CIS -1,2-Dichloroethene	ug/l	Not Analyzed**	472,917	50	472,967	—
Trans-1,2-Dichloroethene	ug/l	< 1	472,917	50	472,967	1.00
Vinyl Chloride	ug/l	< 1	472,917	50	472,967	1.00
1,1-Dichloroethane	ug/l	< 1	472,917	50	472,967	1.00
Benzene	ug/l	< 1	472,917	50	472,967	1.00
MTBE	ug/l	Not Analyzed	472,917	50	472,967	—
Tetrachloroethene	ug/l	< 1	472,917	50	472,967	1.00

\* Intake Background Values from 2004 State IWW Application

\*\* Not One of 126 Priority Pollutants Required for NPDES Application - Not Anticipated to be Present in Ocean Water

\*\*\* Maximum Number of Drums per year - 2 (100 gallons)

**Assumptions for Calculations:**

One Unit Operating - Discharge Canal Flow - 472,917 GPM

Drum Emptied in 1 Minute - 50 GPM

Concentrations from Wells are Maximum Concentrations Observed in One year of Sampling

If observed value is "less than" (<) MDL - The MDL value is used in the calculation

Calculation assumes no mixing with other waste streams from OSN I-005