# ORIGINAL

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		TESTIMONY OF RANDALL R. LABAUVE
4		DOCKET NO. 980007-EI
5		June 29, 1998
6		
7	Q.	Please state your name and address?
8	A.	My name is Randall R. LaBauve and my business address is 700 Universe Boulevard,
9		Juno Beach, Florida 33408.
10		
11	Q.	By whom are you employed and in what capacity?
12	A.	I am employed by Florida Power & Light Company (FPL) as the Director of
13		Environmental Services in the General Counsel Business Unit.
14		
15	Q.	Please describe your educational and professional background and experience.
16	A.	I received a Bachelor of Arts degree in Psychology/Business from Louisiana State
17		University in 1983 and a Juris Doctor degree in Law from Louisiana State University in
18		1986. I joined FPL in 1995 as an Environmental Lawyer and in 1996 assumed the
19		responsibility of Director of Environmental Services. Prior to joining FPL I was the
20		Director of Environmental Affairs for Entergy Services, Incorporated located in Little
21		Rock, Arkansas and prior to that was in private law practice with Milling, Benson,
22		Woodward, Hillard, Pierson and Miller in New Orleans, Louisiana

- Q. What are your responsibilities and duties as Director of Environmental Services?
- 2 A. I am responsible for directing the overall corporate environmental planning, programs,
- 3 licensing, and permitting activities to ensure the basic objective of obtaining and
- 4 main...ning the federal, state, regional and local government approvals necessary to site,
- 5 construct and operate FPL's power plants, transmission lines, and fuel facilities and
- 6 maintain compliance with environmental laws. Additionally, I will sponsor environmental
- 7 related testimony in dockets before the Florida Public Service Commission.

1

- 9 Q. What is the purpose of your testimony?
- 10 A. The purpose of my testimony is to present FPL's conceptual plans for a new
- 11 environmental project that is designed to eliminate the release of contaminants to the
- 12 environment by eliminating discharges of wastewater and stormwater and beneficially
- 13 reusing the wastewater in plant operations. FPL is requesting that the Commission
- 14 approve recovery of the compliance costs associated with this project through the
- 15 Environmental Cost Recovery Clause. My testimony includes a description of the new
- 16 environmental requirements, the compliance actions planned and the rationale for the
- 17 alternative selected.

18

- 19 Q. What are the new environmental requirements and when did each become
- 20 effective?
- 21 A. In 1993 the Environmental Protection Agency (EPA) instituted a new program to
- 22 minimize pollutants of concern in permitted effluents. The EPA administers the program

by requiring regulated facilities to develop and implement a Best Management Practice Pollution Prevention Plan (Plan) as part of the renewal of permits for existing plants with the possible exception of Turkey Point. Permits must currently be renewed approximately every five years as explained below. This is the most substantive new requirement and it is described in Document RRL-1.

# Q. How is FPL affected?

FPL is required to obtain National Pollutant Discharge Elimination System (NPDES)

Permits for each of its power plant facilities pursuant to 33 U.S.C. Section 1342 [Federal Water Pollution Control Act (Clean Water Act) Section 402] and Title 40 Code of Federal Regulations (CFR) Section 122. The Florida Department of Environmental Protection was delegated authority to administer this permit program for the Environmental Protection Agency. FPL is required to submit a permit renewal application for each site every five years. Under the State implementation of the Federal program, these permits are referred to as the State Poliutant Discharge Elimination System Permits (permits).

Each new Permit issued to FPL includes, or will include, a new requirement for FPL to develop and implement a Plan to minimize or eliminate, whenever feasible, the discharge of regulated pollutants, including fuel oil and ash, to surface waters. FPL must submit a Plan for each facility to the Florida Department of Environmental Protection for approval. This requirement, with the emphasis on eliminating discharges, was not part

1		of FPL's permit requirements prior to 1993. Document RRE-2 is a typical permit profi
2		1993 and Document RRL-3 represents a current permit.
3		
4		Document RRL-4 provides a summary of FPL's permits, the date each permit was, or is
5		expected to be, issued and the date a preliminary Plan will be submitted to the agency.
6		Preliminary Plans that have already been submitted simply outline FPL's intent to develop
7		a formal Plan to minimize or eliminate the discharge of pollutants.
8		
9	Q.	Can the Florida Department of Environmental Protection cause FPL to change its
10		plans?
11	A.	Yes. However, FPL expects that the agency will approve for implementation its plans as
12		proposed in this Project. In addition, FPL may make changes as detailed plans are
13		developed for each site during the engineering and design phase of the project.
14		
15	Q.	Are there any other new environmental requirements being met by this project?
16	A.	Yes. The Federal Ambient Water Quality Criteria applicable to discharges to
17		groundwater requires FPL's discharges to groundwater to meet surface water quality
18		standards. In addition, the Multi-source Permit issued by Dade County Department of
19		Environmental Resource Management to FPL for the Turkey Point Power Plant requires
20		FPL to meet Dade County water quality standards in discharges to the Turkey Point
21		Cooling Canals. Both of these requirements were applied to FPL in 1997.

- Q. Please explain the Federal Ambient Water Quality Criteria.
- 2 A. To ensure that Federal Ambient Water Quality Criteria (Standards), see Document RRL-
- 3 5, are not violated, FPL must eliminate discharges of wastewater to groundwater. In a
- 4 letter from the EPA to FPL dated June 13, 1997 (Document RRL-6), the EPA informed
- 5 FPL that any discharges to groundwater that is hydrologically connected to nearby
- 6 surface water must meet surface water standards. For many pollutants, these Standards
- 7 are more stringent than the groundwater limits that FPL must satisfy. For example, the
- 8 Standard for nickel, 8.3 parts per billion, is nearly 92% lower than the previous
- 9 groundwater limit of 100 parts per billion.

16

# 11 Q. How does this new standard affect FPL?

- 12 A. FPL currently has four unlined ash basins located above groundwater that are
- 13 hydrologically connected with nearby surface water. The ash managed in these basins
- 14 contains nickel that is soluable in water. The most prudent option to ensure that very low
- 15 limits, such as the limit for nickel, are not violated is to eliminate the discharges.

# 17 Q. Please explain the Turkey Point Plant Multi-Source Permit.

- 18 A. Dade County, Florida, considers the cooling canals at FPL's Turkey Point Power Plant
- 19 to be waters of the County. Consequently, Dade County requires FPL to obtain a
- 20 Multi-Source Permit (permit), see Document RRL-7, to discharge wastewater into the
- 21 canals. The permit requires FPL's discharges to meet water quality standards identified
- 22 in Section 24-11, Code of Metropolitan Dade County (Document RRL-8). These

1		standards include a limit of 1000 parts per billion for zinc and a limit of 5.0 parts per
2		million for Florida Petroleum Residual Organic (FLPRO). FLPRO is a new parameter
3		that is a measurement of oil and grease. It was included in the 1997-1998 permit issued
4		to FPL.
5		
6		In March 1998, analysis on a discharge into the cooling canal yielded a FLPRO result of
7		4.8 parts per million. During times with no rain oil accumulates on concrete and paved
8		areas. Heavy rains following the dry period could flush the accumulated oils and greases
9		into the regulated discharge and cause the FLPRO limit to be exceeded.
10		
11	Q.	Does the project meet the compliance needs of all three new requirements?
12	A.	Yes. Based on the conceptual plans, the project is designed to eliminate the release of
13		contaminants to the environment by eliminating discharges of wastewater and stormwater
14		and beneficially reusing the wastewater in plant operations. Completion of the Project
15		will ensure that FPL is in compliance with the new environmental requirements related to
16		wastewater and stormwater.
17		
18		Page 1 of 2, Document RRL-9, provides an overview of the current
19		wastewater/stormwater flows. It represents the general flows typical at FPL plants. Page
20		2 of 2, Document RRL-9, provides an overview of the flows after modifications based on
21		conceptual plans.

# Q. How did FPL decide to address these new requirements?

A. Given the varying new requirements, a team including a wastewater
management/environmental consultant was formed to address the issue of wastewater and
stormwater management. The team identified potential options to eliminate discharges
and manage the resulting accumulation of water. A conceptual plan for collecting,
treating and reusing the wastewater generated at each plant was developed.

Historical rainfall data relevant to two sites was reviewed to determine the volumes of stormwater that would need to be managed. Historical records were reviewed and interviews with plant employees were conducted to estimate the expected volumes of ash sluice water. This information was used to determine the approximate sizes of tanks needed to contain the volumes of water and to determine the size of sumps and pumps necessary to handle the volumes.

# O. What alternatives did FPL consider?

Four alternatives were considered. The first alternative is FPL's proposed Project. In general, the Project involves modifications to existing wastewater/stormwater treatment systems and service water systems at 10 FPL power plant sites. Project activities include procurement and installation of: liners for unlined basins; water treatment/retention tanks; piping; pumps; sumps; and ancillary equipment. It also involves site preparation such as excavation necessary for the foundations and basin preparation. The Project will also include engineering and design work.

The scope of work anticipated for each site is provided in Document RRL-10. The activities identified are based on conceptual plans and are subject to change if alternatives determined to be more prudent are identified during the engineering and design phase of the project or if the Florida Department of Environmental Protection requires changes to the Best Management Practices Plan. Detailed plans will be developed for each site during the engineering and design phase of the project.

The second alternative considered was to install dry-ash handling systems to eliminate ash sluice water. An engineering firm was hired to evaluate dry-ash handling options. The consultant concluded that dry-ash handling would not eliminate all we: ash handling. Consequently, the plants would continue to need ash basins. The consultant estimated that it would cost approximately \$10 million to \$18 million to install just the dry-ash handling systems at the seven sites that handle ash. In addition to the high cost of installation, this option would also increase annual operating and maintenance costs by approximately \$500,000 to \$600,000 per year.

The third alternative considered was based on the recommendation of an environmental consultant hired specifically to help FPL identify options. The consultant recommended that FPL install membrane treatment systems and evaporators at each site. The membrane treatment systems would reduce the concentration of contaminants in the wastewater. The wastewater would then be eliminated by evaporation using the evaporators. The consultant provided a preliminary cost estimate of \$5 million per site for the membrane

treatment system and evaporator. This option would bring the total project cost to more than \$50 million.

The fourth option considered was to evaporate the wastewater in the boilers. This option would still require most of the same modifications that are anticipated in the proposed project. In addition to negative impacts on the boiler performance, it was determined that this option would potentially subject FPL to a different series of existing air and industrial boiler regulatory requirements. It was also concluded that this option did not provide a reliable method for managing the water because the boilers may not be operating when there is a need to eliminate water.

Based on evaluation of available alternatives, it was clear that the Project FPL is proposing is the most cost effective means of meeting the new environmental requirements.

Q.

# Has FPL estimated the cost of the proposed Project?

Yes. FPL's preliminary cost estimate totals approximately \$13 million (capital - \$8 million, O&M - \$5 million) which will be incurred over approximately 24 months beginning in the second half of 1998. These amounts as well as the schedule are subject to change as changes are made to the conceptual plans as a result of developing the detailed plans or agency required changes.

If the Commission approves this project for recovery through the ECRC, FPL will include the project in its next projection filing (October 1998) and amounts incurred or planned to be incurred in 1998 will be included in the Company's estimated/actual true-up for that period. As required by the Commission, FPL will update its projections and explain variances between projected and actual expenditures. This process is one going and will ensure that changes are identified and reported timely. In addition, primarily through the Commission's Audit Stuff, the Commission maintains its ability challenge the prudence and reasonableness of actions and costs.

# 10 Q. How will FPL ensure that costs incurred are prudent and reasonable?

A. As much as possible, FPL will use FPL employees to complete this project. FPL payroll will not be charged to the project for ECRC recovery purposes. FPL will solicit competitive bids for the equipment and materials needed for the project. In addition, FPL will contract an engineering/consultant firm to provide engineering and design support for the project.

- Q. Is FPL recovering through any other mechanism any costs included in this petition for ECRC recovery?
- A. No. All costs associated with this project are new costs to comply with new environmental requirements. Therefore, costs associated with this project would not have been incurred or included in any recovery mechanism in the past. All costs are directly related to modifications to existing systems at the plants.

- Does this conclude your testimony?
- 2 A. Yes it does.

# Florida Power & Light Company

# Docket No. 980007-EI

# List of Exhibits

Final Permit - Putman Power Plant and	
Best Management Practices / Pollution Prevention Conditions	RRL-1
Permit for FPL Port Everglades Power Plant - Old	RRL-2
Permit for FPL Port Everglades Power Plant - Current	RRL-3
NPDES Permit Issuance Dates & BMP3 Submittal Dates	RRL-4
Ambient Water Quality Criteria	RRL-5
Letter From EPA Dated June 13, 1997	RRL-6
Multiple Source Annual Operating Permit	RRL-7
Section 24-11, Code of Metropolitan Dade County	RRL-8
Wastewater/Stormwater Discharge Elimination - Diagrams	RRL-9
Scope of Work by Site	RRL-10



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365

SEP 2 8 1983

# AMENDMENT TO THE FACT SHEET AT THE TIME OF FINAL PERMIT ISSUANCE

NPDES Number: FL0032166

Name of Applicant: Florida Power and Light Company Putnam Power Plant

- Changes made to Permit from Draft Permit to Final Permit Stage:
  - A. Page I-2: The following language was added to item 9:

"If the background for this parameter in the St. Johns River exceeds the applicable State water quality standard, the concentration value for the parameter at the edge of the mixing zone shall not exceed the applicable background value. The background grab sample shall be taken during the same 24-hour period as the effluent sample, and shall be reported on the DMR."

This language was added based on information from the company showing that the facility is granted a non-thermal mixing zone in the St. Johns River for cooling tower blowdown for total iron, total copper, total nickel and total zinc. Granting of the mixing zone is consistent with Florida Statute 408.081(11)(a), and is based on data that shows that the water quality of the St. Johns River can, on occasion, exceed state WQS without influence from the Putnam Plant.

- B. Page I-6: A 50.0 mg/l effluent limitation for total phosphorus was added based on the state certification (see item 3. below).
- C. Page I-8: The compliance schedule for implementing the Suspended Metals Minimization Plan for Outfall 007 was changed from "6 months after approval from EPA" to "18 months after approval from the permitting authority". This change was made to allow the permittee enough time to secure a contractor to carry out the plan.
- D. Part IV Best Management Practices/Pollution Prevention (BMP3) Conditions: The following changes were made in order to more appropriately reflect the intent and scope of a BMP3 plan at steam electric generating facilities:

RRL-1
Docket No. 980007-E1
FPL Witness R. R. LaBauve
Exhibit No.
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- a. The first paragraph was re-worded to clarify that inclusion of pollution prevention measures as part of a Best Management Practices (BMP) plan is "consistent" with the Pollution Prevention Act of 1990, and to explain that any BMP plan developed in accordance with a previous NPDES permit may be used to satisfy some for the requirements of the BMP3.
- b. The phrase "as appropriate for the NPDES storm water program and toxic pollutants" was added to the definition of pollutants.
- c. A reference was included in the definition of nonconventional pollutants that cites where a list of these substances can be found.
- d. The phrase "For purposes of this part" was added at the beginning of the definition of toxic pollutants and the phrase "or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986" was deleted. The phrase "or that is a pesticide regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)" was added at the end of the definition.
- e. The phrase "associated with a Waste Minimization Assessment" in the definition of RMP3 was replaced with the following language: "except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs."
- f. The following definition was added as item 1.J.:
  - "The term 'material' refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvent, etc.). It does not include lumber, boxes, packing materials, etc."
- g. The second sentence in Section 2 was changed to clarify that the BMP3 plan shall be directed at pollutants of concern which do, "or could", discharge to surface waters.
- h. The first sentence in Section 3 was deleted and the last sentence was reworded. It now reads: "Training shall be provided for the individuals responsible for implementing the BMP3 plan."
- In item 4.b, the word "specfic" was replaced with the word "toward" and the words "goals for" were

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June 29, 1998
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replaced with the word "of."

- j. The words "results of the assessment" were deleted from item 4.e. Also, the following words were added after the first clause: "without compromising production efficiency or jeopardizing operations". The word "by-products" was replaced with the words "degradation products" in item 4.e.(iii)(4).
- k. The paragraphs entitled "Implementation of Results" and "Timeframe" were deleted from Section 5, and the remaining language in Section 5 was incorporated into item 4.e.
- The word "Recommended" was deleted from the heading for Section 6 (renumbered as Section 5), and the phrase "monitoring of success, and revision." was deleted from the second sentence of the first paragraph.
- m. In the first sentence of Section 7 (renumbered as Section 6), the word "appropriate" was inserted after the word "inform" and the words "at all levels of responsibility" were deleted. The entire third sentence was also deleted.
- n. The words "or updated within 3 months" were inserted after the word "developed" in the first sentence of Section 8 (renumbered as Section 7), and the entire second and third sentences were deleted. The following language was also added as a second paragraph:

"In cases of facilities that were not previously required to have a BMP plan, the plan must be developed within 6 months after the effective date of the permit, and implemented within 18 months after the effective date of the permit.

- o. Items 9 and 11 were deleted.
- P. Section B was incorporated into item 4.e.

# Public Comments:

The only comments received were those submitted by the permittee.

a. Comment: The following language should be added to item 9 on page I-2:

"If the background value for any parameter in the St.

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# PART IV

# BEST MANAGEMENT PRACTICES/POLLUTION PREVENTION CONDITIONS FOR STEAM ELECTRIC GENERATING FACILITIES

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and consistent with the policy of the Pollution Prevention Act of 1990, 42 U.S.C. \$\$ 13101-13109, the permittee must develop and implement a Best Management Practices plan incorporating pollution prevention measures. This part does not require the permittee to incorporate pollution prevention measures that would jeporadize efficient operation or result in an unreasonable economic burden. A Best Management Practices plan developed as a requirement of a previous NPDES permit will satisfy the requirements of this part if it addresses practices to reduce the likelihood of spills or other releases of oil or oil contaminated water, water treatment chemicals, cleaning chemicals, and biocides that may enter waters of the United States. References which may be used in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act., found at 40 CFR 125, Subpart K, the Waste Minimization Opportunity Assessment Manual, EPA/625/7-88/003 and other EPA documents relating to Best Management Practice guidance.

# Definitions

- a. The term "pollutants" refers to conventional, non-conventional and toxic pollutants, as appropriate for the NPDES storm water program and toxic pollutants.
- Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- C. <u>Non-conventional pollutants</u> are those which are not defined as conventional or toxic, such as phosphorus, nitrogen or ammonia. (Ref: 40 CFR Part 122, Appendix D, Table IV)
- d. For purposes of this part, <u>Toxic pollutants</u> include: a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, and b) any substance (that is not also a conventional or non-conventional pollutant) for which EPA has published an acute or chronic toxicity criterion, or that is a pesticide regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
- e. "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- f. "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products in place of the original stock, or for other purposes such as material recovery, material regeneration or energy production.

RRL-1
Docket No. 980007-E1
FPL Witness: R. R. LaBauve
Exhibit No.
Title: Final Permit - Putnam Power Plant &
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- "Source reduction" means any practice which: i) reduces the g. amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and ii) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
  - h. "BMP3" means a Best Management Plan incorporating the requirements of 40 CFR \$ 125, Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
- i. "Naste Minimization Assessment" means a systematic planned procedure with the <u>objective</u> of identifying ways to reduce or eliminate waste.
- j. The term "material" refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.

# 2. Best Management Practices/Pollution Prevention Plan

The permittee shall develop and implement a BMP3 plan for the facility which is the source of wastewater and storm water discharges covered by this permit. The plan shall be directed toward reducing those pollutants of concern which discharge, or could discharge, to surface waters to and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities.

# 3. Signatory Authority & Management Responsibilities

A copy of the plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.

The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. Such statements shall be publicized or made known to all facility employees. Training shall be provided for the individuals responsible for implementing the BMP3 plan.

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FPL Witness, R. R. LaBaure
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# Florida Department of Environmental Regulation

Southeast District 9 1900 5. Congress Avc., Suite A 9 West Palm Beach, Florida 33406

Lawton Chiles, Governor

Telephone: 407/433-2650 Paic 407/433-2666

Carol M. Browner, Secretary

PERMITTEE: Mr. Charles Henderson Air and Water Permitting and Programs Florida Power & Light Company P. O. Box 078768 West Palm Beach, FL 33407

I.D. NUMBER: 5006P00656
PERMIT/CERTIFICATION NUMBER: 10 06-170560
BATE OF ISSUE: 1118 3 0 1002
EXPIRATION DATE: METCH 5, 01996
COUNTY: Broward
LATITUDE/LONGITUDE: 26°05'07"/80°07'34"
SECTION/TOWNSHIP/RANGE: 23/T505/RA2E
PROJECT: FFL Port Evergledes Power Plant

THIS PERMIT SUPERCEDES THE PERMIT ISSUED BY THE DEPARTMENT ON MARCH 5, 1991

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Plorida Administrative Code Chapter(s) 17-3, 17-4, and 17-660. The above named permittee is hereby authorized to perform the work or operate the racility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

OPERATE: An industrial wastewater treatment and disposal system including the following, to be discharged to the Discharge Canal, a Class III surface water body: 1253 MGD once-through condenser cooling water; suriliary pooling water for Units 1 and 2; and storm water overflow from 8-5 basin and the East Fuel Oil Tank Farm. Sources of wastewater discharged to the Intake Canal include: screen wash water; demineralizer cation/anion exchange wastewater after pH adjustment; storm water overflow from the North Tank Farm; and boiler blowdown (alternate disposal method). Sources of wastewater discharging to Class G-II ground water include: boiler chemical cleaning riness; economizer hopper wash; dust collector wash; air preheater wash; boiler fireside wash; stack wash; equipment cleaning; beiler blowdown (alternate disposal method); and demineralizer cation/anion exchange wastewater (alternate disposal method); all of the above which percolate wis Solids Settling Basins 8-2 and 8-3. "Equipment Area" storm water and oily wastes from routine equipment cleaning discharge to ground tater via Stormwater Basins 8-1 and 8-5. Oil/water separators treat the tank farm overflow and oily waste from equipment cleaning prior to discharge. Boiler blowdown is normally reused via the Boiler Blowdown Recovery Basin.

IR ACCORDANCE WITH: Application for Renewal of Permit, received September 26, 1989; additional information received Harch 29, 1990; Final Order granting an exemption from the sodium standard for Class G-II ground waters, signed January 4, 1991 by the DER Secretary.

LOCATED AT: 8100 Eisenhover Blvd., Ft. Lauderdale, Florida.

TO SERVE: A steam electric power plant - four units rated at 1,255 megavatts (total nominal capacity). The boilers are fired using No. 6 Fuel Oil or Natural Gas.

SUBJECT TO: General Conditions 1-15 and Specific Conditions 1-20.

Page : of 6

DER Form 17-1.201(5) Effective November 30, 1982



RRL-2
Docket No 980007-EI
FPL Witness R. R. LaBauve
Exhibit No
Title Permit for FPL Port Everglades
Power Plant - Old
June 29 1998
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# GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, amhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Meither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or vater, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of subserged lands unless herein provided and the necessary title or lessehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or velfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pellution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The parmittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or suciliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon prescritation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - (a) A description of and cause of noncompliance; and
  - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

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DER Form 17-1.201(5) Effective November 30, 1982 RRL-2
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# . GENERAL CONDITIONS:

- 10. The permittee agrees comply with changes in Depart at rules and Florida Statutes after a reasonable-cime for compliance; provided, grant, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - ( ) Determination of Best Available Control Technology (BACT)
  - ( ) Determination of Prevention of Significant Deterioration (PSD)
  - ( ) Certification of compliance with state Water Quality Standards (Section 401, PL 92-300)
  - ( ) Compliance with Hew Source Performance Standards
- 14. The permittee shall comply with the following:
  - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - (b) The permittee shall hold at the facility or other location designated by this permit records of all menitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - (c) Records of monitoring information shall include:

    - 1. the date, exact place, and time of sampling or measurements;
      2. the person responsible for performing the sampling or measurements;
      3. the dates analyses were performed;
      4. the person responsible for performing the analyses;
      5. the analytical techniques or methods used;
      6. the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by lew which is needed to determine compliance with the permit. If the permittee bacomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
- 16. In the case of an underground injection control permit, the following permit conditions also shall apply:
  - (a) All reports or information required by the Department shall be certified as being true, securate and complete.
  - (b) Reports of compliance or noncompliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
  - (c) Notification of any noncompliance which may endanger health or the environment shall be reported verbally to the Department within 24 hours and again within 72 hours, and a final written report provided within two weeks.
  - The verbal reports shall contain any wonitoring or other information which indicate that any contaminant may endanger an underground source of drinking water and any noncompliance with a permit condition or maifunction of the injection system which may cause fluid migration into or between underground sources of drinking-water.

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FIRMITTEE: Mr. Charles Henderson Air and Water Permitting and Programs Florida Power & Light Company I.D. HUMBER: \$156POGE56
PERMIT/CIRTIFICATION NUMBER: IO 06-170560
DATE OF ISSUE: JUN 3 0 1992
EXPIRATION DATE: MAR 0 3 1995

### SPECIFIC COMPITIONS:

- 1. Unless otherwise authorized by this permit the permittee shall maintain the quality and quantity of the effluent discharged such that it does not cause a violation of the water quality standards set forth in Chapter 17-3, F.A.C. Should conditions warrent, the permittee may be required by the Department to upgrade, reduce or cease the discharge of effluent and adopt an alternate method of disposal.
- 2. The treatment facilities are to be operated in such a manner that the designed level of efficiency is maintained at all times.
- 3. He wastewater shall be allowed to deliberately bypass the treatment facility, except in cases of emergency, without the prior approval of the Department. The Department shall be promptly ostified, in writing, of the emergency and all information as to the cause of the problem and the corrective measures to be taken to prevent its recurrence.
- 4. This permit does not authorize the treatment, storage or disposal of hazardous vastes.
- 5. The discharges from this facility shall comply with Gode of Regulations of the Broward County Office of Matural Resource Protection (BCONEP), Chapter 27, as applicable.
- 6. The permittes shall maintain reasonable access to all the monitoring stations required by this permit. In order to assure that representative samples are obtained, it shall be the responsibility of the permittee to maintain the integrity of the monitoring stations and protect them from destruction or vandalism. Should any of these stations be destroyed, the permittee shall notify the Department immediately. The notification shall include pertinent information as to the cause, and what steps are being taken to replace the monitoring station and prevent the recurrence of such problems in the future.
- 7. All sampling and enelysis shall be conducted in accordance with FAC Bule 17-4.246 and Chapter 17-150, Quality Assurance. Monitoring reports shall be submitted quarterly to the Department no later than thirty (30) days after the end of the quarter (by April 30, July 30, October 30 and January 30). Additional sampling and analysis may be required as conditions warrant in order to further assess the water quality.
- 8. All records and data relating to this permit, including field sampling and nonitoring logs, shall be maintained at the facility and made available for inspection by the staff of the Department. Copies of all reports, tests, notifications or other submittels required by this permit shall be submitted to the Department of Environmental Regulation, Southeast Florida District Office and Broward County Office of Natural Resource Protection.
- 9. In accordance with PAC Eule 17-660.400(1)(e) the EPA technology based effluent limitations as referenced in 40 GPR 425 shall be met prior to discharge to either the Intake or Discharge Canale. In addition the minisum and general criteria for surface waters as referenced in FAC Eules 17-302.500 and 17-302.510, as well as the criteria for Class III Marins surface waters as referenced in FAC Eule 17-302.560, shall be met at the Point of Discharge (POD). In cases where effluent is in compliance with the technology based limits but exceeds State water quality based effluent limits at the POD, the Department may require additional treatment if feasible or may allow a mixing zone in accordance with FAC Eule 17-4.244.
- 10. Ho later than minety (90) days from the issuance date of this permit and upon receipt of all necessary approvals, FPL shall install a 4 x 4-inch mesh synthetic net at a point approximately 600 ft. downstream of the condenser outlets as depicted in drawings submitted to the Department on April 7, 1992. The point of discharge (POD) into state waters shall be at this point. Waters contained in the Discharge and Intake Canals upstream of the POD shall not be considered as state waters once the net has been installed.

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PERMITTEE: Mr. Charles Menderson Air and Water Permitting and Programs Florida Power & Light Company I.D. HUMBER: \$156PO6D24
PERMIT/CERTIFICATION NUMBER: 10 56-194945
DATE OF ISSUE: JUN 3 0 1992
EXPIRATION DATE: MAP 0 3 1008

### SPECIFIC CONDITIONS:

11. Storm water from the Puel 0:1 Tank Farms shall be considered uncontaminated (i.e., not contaminated by process and/or product materials) and may be discharged without menitoring. However, these discharges shall not cause a visible sheen on the receiving water.

12. The solids Settling Basins B-2 and B-3 shall be monitored for discharge to the respective overflow containment areas. The Discharge Monitoring Report shall indicate, how many days in the south an overflow occurs from Basins B-2 and B-3.

13. Monitoring wells NOB-1 (Background), and compliance wells NOB-2A, NOB-2B, NOB-3A, NOB-3B and D-1 shall be sampled quarterly and analyzed for the following parameters:

Sodium Total Disselved Selids Svifate Hanganese Vyter

The wells shall also be analyzed on a semi-annual basis for the following parameters:

Fluoride Arsenic Copper Chromium Lead Hickel Silver Zinc Oil & Grease

The wells shall also be sampled annually for the following:

EPA Nethods 601 and 602

Minisum detection limits shall be no greater than ground water standards or surface water standards (if applicable) as indicated on the Ground Water Monitoring Report.

14. Flow rates of cooling water for each Unit shall be measured hourly by ratorder or pump logs and monthly average and maximum rates (MGD) reported quarterly. The discharge temperatures shall be continuously recorded and maximum monthly temperatures reported quarterly. The temperature difference between the discharge and intake waters shall be recorded every four hours and the maximum monthly difference reported quarterly. Limitations on the discharge temperature shall be as given in FAC Rule 17-302.520 Thermal Surface Water Criteria. Chlorination of condenser cooling water shall not occur more than two (2) hours per day for each unit. Sampling for Total residual Chlorine shall be done during chlorimation.

15. Pursuant to FAC Rule 17-28.700, a zone of discharge is granted to the property boundary, in which Class G-II ground water standards may be exceeded, provided that it is affirmatively demonstrated by FPEL that the discharge will not impair the designated uses of contiguous waters outside the sone of discharge, including the adjacent Class III - Harine surface waters. The minimum criteria for ground water, as referenced in FAC Rule 17-3.402 shall apply within the sone of discharge. Furnament to the final Order granting an exemption from the sodium standard for class G-II ground water, signed January 4, 1991, by the DER Secretary, the permittee is not required to comply with the sodium standard for Class G-II ground water.

16. Within sixty (60) days of the effective date of this permit, the permittee shall initiate the toxicity testing program as outlined in Attachment A. Test species shall be Mysidopsia bahis and Menidia berylling.

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PERMITTEE: Mr. Charles Henderson Air and Water Permitting and Programs Florida Power & Light Company I.D. NUMBER: 5156P06024
PREMIT/CERTIFICATION NUMBER: 10 56-194945
DATE OF ISSUE: JUN 3 0 1992
EXPIRATION DATE: MAR 0 3 1996

# SPECIFIC COMDITIONS:

17. No later than January 1, 1993, FP&L shall request a thermal mixing zone in accordance with Sections 17-302.520 and 17-4.244, F&C, or explain in writing why a thermal mixing zone is not required. The request shall include documentation of survey data from the Summer of 1992. Biological, thermal and dissolved oxygen monitoring shall be included in this survey. Until the Department makes a determination otherwise, the previous thermal mixing zone allowed by the department under permit 10 06-081476 shall continue in effect.

18. Technology based and water quality based effluent limit standards shall be monitored for according to the schedule given in Attachment A. Results shall be submitted using either the MPDES Discharge Monitoring Report or similar form used by FPEL.

19. Sampling and analyses of effluents and receiving waters shall conform to the requirements of Chapter 17-160, FAC, Quality Assurance.

20. At least sixty (60) days prior to the expiration of this permit, the permittee shall submit an application to renew this permit.

Issued this 26 The day of Jhare, 1991

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Bebby A. Cooley, P.B. Acting Director of District Hanagement

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### ATTACHMENT A

# TECHNOLOGY BASED EFFLUENT LIMIT SAMPLING PROGRAM

All standards apply and samples must be taken prior to discharge to the Intake or Discharge Canals. Report monthly averages and maximum values, except for pH report minimum and maximum, and for low volume wastes (non-cooling water) report monthly total flows and maximum daily flows.

1. Once Through Condenser Cooling Water from Units 1, 2, 3 & 4:

Parameter Flow (MGD) Discharge Temp. Temp. Rise Total Residual Chlorine Trequency/type
Continuous from recorder or pump log
Continuous
Every four hours
Once/two weeks - grab

2. Boiler Blowdown, Neutralization Basins Stormwater Basin B-5:

Parameter
Total Flow (AG)
Flow (MGD)
Total Suspended Solids
Oil & Grease

Frequency/tyne
Monthly for each waste stream
Daily
Once/two weeks - composite
Once/two weeks - grab
Once/two weeks - grab

# WATER QUALITY BASED EFFLUENT LIMIT SAMPLING

1. Discharge Canal at POD

Parameter
Total Residual Chlorine
Tamparature
Aluminum, Arsenic, Cadmium,
Copper, Dissolved Caygen,
Fluorides, Iron, Lead, Hercury,
Nickel, Selenium, Zinc

Praguency/type Once/two weeks - grab Once/two weeks Once/6 months - grab

2. Total Besidual Chlorine shall be sampled for during condenser chlorination and shall consist of at least four separate grab samples taken 15 minutes apart. The maximum concentration of chlorine shall be reported.

# TOXICITY TESTING

There shall be two separate toxicity tests run on the once-through cooling water at
the POD. The samples shall be taken during normal operating conditions but also during
chlorination of the condensers. The second toxicity test shall be conducted no later
than 6 months from the date of the initial test.

2. The tests will be conducted on four separate grab samples of 100% whole effluent taken at the FOD, collected at evenly spaced (6-hour) intervals ever a 24-hour period and used in four separate tests in order to account for daily variations in effluent quality. All test procedures shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Preshwater and Marine Organisms", Fourth Edition, EPA/600/4-90/027. If any of the screening tests indicate unacceptable toxicity (less than 80% survival), the permittee shall within seven (7) days initiate a series of definitive acute bleassays. Beginning no later than the sighth day after an unacceptable result has been determined, the facility shall conduct a series of three 96-hour acute definitive bleassay tests, one every four days, at the same time of day and discharge condition, as the greatest toxic response occurring during the acreening test. If only one of the test species exhibited an unacceptable toxic response, then only that species shall be used for the definitive tests.

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# DEPARTMENT OF ENVIRONMENTAL REGULATION INDUSTRIAL WASTE DISCRARGE MONITORING REPORT

	LABORATORY:		A	LABORATORY RALYSIS DATE: _	ID#:	
SAMPLE LOCATI	OR/SITE #		Minimum Detection Limit (MDL)	Weil NOB-1	Monitor Well HOB-2A	Monitor Well HOB-21
CODE/E	ARAMETER/USIT		Limit (MDL)	5006A11664	5006A10820	5006A10821
900219	Iron	mg/1	0.15			200
900220	Manganese	mg/l	0.03			
000945	Sulfate	ng/1	0.5		第二十二	
070304	IDS	mg/1	4.0		<b>16</b> E	X.15
000930	Sodium	25/1	0.5	15 Lat 18	W	
000950	Pluoride	Bg/1	0.01			
900208	Arsenic	mg/1	0.005			
900218	Copper	mg/1	0.02			
900211	Chromium	ms/1	0.01		Hall Sales	
900212	Lead	mg/1	0.01			
001067	Nickel	mg/1	0.05			
900215	Silver	mg/1	0.01		Mr. F	-217
900221	Zine	mg/1	0.03		May 1	1.77
000556	011 & Grease	mg/1	5.0			
HAME/T	TILE OF CHARES C	IR .			Service Control	
AUTHOR	IZED AGENT				. L. 29号型	
			SIGNATURE OF	OWNER OR	TELEPHONE :	NUVOER

IW-DMR Chart: vka/330

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# DEPARTMENT OF ENVIRONMENT / REGULATION THOUSTRIAL WASTE DISCHARGE MONITORING REPORT

NAME OF SAMPLING	LABORATORY:		- A	LABORATORY (ALYSIS DATE:	IDØ:	
-	ON/SITE #		Monitor Well NOB-3A	Monitor Well NOS-33	Monitor Vell D-1	Overflow from Basins
-	ARANGTER/UNIT	1 22	5006A10822	5006A10823	5006A21730	B-2 or B-3
900215	A STATE OF THE PARTY OF THE PAR	mg/1				
900220	Manganese	mg/1				
000945	Sulfate	mg/2				
070304	TDS	mg/l		12.9	1011	
000930	Sodium	mg/1				-
000930	Fluoride	mg/1				-
900208	Arsenic	mg/1	or the second			
900218	Copper	mg/1			A STATE OF THE STA	
900211	Chromium	mg/1				
900212	Lead	mg/1				•
001067	Wickel	mg/1	See Alle Company			-
900215	Silver	mg/1			10	•
900221	Zine	mg/1				
000556	011 & Grease	mg/1				•
	Overflow B-2	days				
	Overflow B-3			•	-	
-				RISIN A		
		Total Service				
MAME/	TITLE OF OWNER O	)R				
			SIGNATURE OF	OWIER OR	TELEPHONE	NUMBER
		do as Alloy	ATTUADITED DE			

IW-DMR Chart: vks/330

TYPED OR PRINTED

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DATE

# STATE OF FLORIDA INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMIT NUMBER:

EXPIRATION DATE:

APPLICATION NO.:

ISSUANCE DATE:

FL0001538

Draft

Draf?

280298

# PERMITTEE:

Florida Power & Light Company Port Everglades Plant Post Office Box 12116 Fort Lauderdale, Florida 33316-3118

Attention: Plant General Manager

### FACILITY:

Port Everglades Plant 8100 Eisenhower Road Broward County Port Everglades, Florida 33316

Latitude: 26° 05' 04" Longitude: 80° 07' 31"

s permit is issued under the provisions of Chapter 403, Florida Statutes, and applicable rules of the Florida Administrative Code and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. The above named permittee is hereby authorized to operate the facilities shown on application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

# TREATMENT FACILITIES:

Various wastewater streams generated at the facility including dust collector sluice water, economizer hopper wash, air preheater wash, dust collector wash, equipment wash, boiler fireside wash, stack wash and water treatment system multimedia filter backwash are discharged to the two solids settling basins and their respective overflow areas. Other water treatment system effluent streams may also be discharged to the two solids settling basins as an alternate disposal method. The bottoms of the solids settling basins are lined with limerock which serve as a media for the capture (precipitation) of dissolved metals in the liquid fraction of the waste stream as it percolates through the limerock layer.

The equipment area runoff treatment system is designed to collect and retain the first inch of rainfall that falls on the plant's equipment areas plus minimal flows from the service water rinses in the power block area. Drainage from areas subject to oil contamination is routed through oil/water separators or oil traps. Runoff in excess of the first inch is routed to the discharge canal.

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# SURFACE WATER EFFLUENT DISPOSAL:

This permit authorizes the discharge from Outfall D001-Point of Discharge (once-through cooling water, formerly Outfalls 001); Outfalls D0111, D0112, D0113, and D0114 (once-through cooling water, formerly Outfalls 001A-D); Outfalls D0181, D0182, D0183, and D0184 (auxiliary equipment cooling water, formerly Outfalls 001E-H); Outfalls D01D1, D01D2, D01D3, and D01D4 (auxiliary equipment cooling water, formerly Outfalls 001 I-L); Outfall D016 (boiler blowdown, formerly Outfall 002); Outfall D012 (water treatment system effluent streams, formerly Outfall 003); Outfall D01B1 (equipment area storm water system discharge, formerly Outfall 004); Outfalls D01B2 and D00B3 (storm water from diked petroleum storage or handling areas, formerly Outfalls 005A-B); and Outfall D019 (intake screen wash water, formerly Outfall 007). Discharge is to the Intracostal Waterway, a Class III marine water, via a 5,200 foot discharge canal.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Part I 12 pages, Part II 1 page, Part II 12 pages, Part IV 1 page, Part VI 1 page, Part VI 1 page, Part VI 1 page, Part VI 1 pages, Part VII 5 pages, P

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ISSUANCE DATE: Draft
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# VI. Compliance Schedules and Self-imposed Improvement Schedules

# A. Schedule of Compliance

- The permittee shall achieve compliance with the effluent limitations and conditions of this permit in accordance with the following schedule:
- b. Best Management Practices Pollution Prevention(BMP3) Plan ( See Part VII, Subpart C)
- 2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

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# VII. Other Specific Conditions

# A. Specific Conditions Applicable to all permits

- Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file with the Department, are made a part hereof.
- If significant historical or archaeological artifacts are discovered at any time within the project site, the permittee shall immediately notify the District Office and the Bureau of Historic Preservation, Division of Archives, History and Records Management, R.A. Gray Building, Tallahassee, Florida 32301.
- Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
- This permit satisfies industrial wastewater program permitting requirements only and does not authorize
  operation of this facility prior to obtaining any other permits required by local, state or federal agencies.

# B. Duty to Reapply

- The permittee shall submit an application to renew this permit at least 180 days before the expiration date of this
  permit.
- The permittee shall apply on the appropriate form listed in Rule 62-620.910, F.A.C., and in the manner established in Rules 62-620.400 through 62-620.460, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.
- 3. An application filed in accordance with subsections 1. and 2. of this part shall be considered timely and sufficient. When an application for renewal of a permit is timely and sufficient, the existing permit shall not expire until the Department has taken final action on the application for renewal or until the last day for seeking judicial review of the agency order or a later date fixed by order of the reviewing court.
- The late submittal of a renewal application shall be considered timely and sufficient for the purpose of extending
  the effectiveness of the expiring permit only if it is submitted and made complete before the expiration date.

# C. Specific Conditions Related to Best Management Practices Condition

# 1. Best Management Practices Plan :

In accordance with Rule 62-620.620(1)(n), the permittee shall develop and implement a Best Management Practices incorporating pollution prevention measures. References which may be used in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act", found at 40 CFR Section 122.44(k), the Storm Water Management Industrial Activities Guidance Manual, EPA/833-R92-002 and other EPA documents relating to Best Management Practice guidance.

# 2. Definitions:

- a. The term "pollutants" refers to conventional, non-conventional and toxic pollutants, as appropriate for the NPDES storm water program and toxic pollutants.
- Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria
  and oil & grease.

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 Non-conventional pollutants are those which are not defined as conventional or toxic, such as phosphorus, nitrogen or ammonia. (Ref: 40 CFR Part 122, Appendix D, Table IV)

- d. For purposes of this part, <u>Toxic pollutants</u> include, but are not limited to: a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, and b) any substance (that is not also a conventional or non-conventional pollutant) for which EPA has published an acute or chronic toxicity criterion, or that is a pesticide regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
- e. "Pollution prevention" refers to the first category of EPA's preferred hazardous waste management strategy source reduction.
- f. "Significant Materials" is defined as raw materials; fuels; materials such as solvents and detergents; hazardous substances designated under Section 101(14) of CERCLA; and any chemical the facility is required to report pursuant to EPCRA. Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge.
- g. "Source reduction" means any practice which: i) reduces the amount of any pollutant entering a waste stream prior to recycling, treatment or disposal; and ii) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
- h. "BMP3" means a Best Management Pollution Prevention Plan incorporating the requirements of 40 CFR § 125. Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
- i. "Reportable Quantity (RQ) Discharge" A RQ release occurs when a quantity of a hazardous substance or oil is spilled or released within a 24-hour period of time and exceeds the RQ level assigned to that substance under CERCLA or the Clean Water Act. These levels or quantities are defined in terms of gallons or pounds. Regulations listing these quantities are contained at 40 CFR 302.4, 40 CFR 117.21 and 40 CFR 110.
- j. The term "material" refers to chemicals or chemical products used in any plant operation (i.e., causic acida, hydrazine, degressing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.
- 3. Best Management Practices/Pollution Prevention Plan:

The permittee shall develop and implement a BMP3 plan for the facility which is the source of was tewater and storm water discharges. The plan shall be directed toward reducing those pollutants of concern which discharge, or could discharge, to surface waters to and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants and significant materials, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including storm water, water and waste treatment, and plant ancillary activities.

4. Signatory Authority & Management Responsibilities:

A copy of the BMP3 plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.

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The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. The BMP3 plan shall be signed and reviewed by the plant management.

5. BMP3 Plan Requir

The following requirements may be incorporated by reference from existing facility procedures:

- a. Name and description of facility
- b. A site map At a minimum the site map must include information of the following: discharge points ("outfalls"); drainage patterns; identification of the types of pollutants likely to be discharged from each drainage area; direction of flow; surface water bodies, including any proximate stream, river, lake, or other waterbody receiving storm water discharge from the site; structural control measures (physically constructed features used to control storm water flows); locations of "significant materials" exposed to storm water; locations of industrial activities (such as fueling stations, loading and unloading areas, vehicle or equipment maintenance areas, waste disposal areas, storage areas).
- c. A materials inventory including the types of materials that are handled, stored, or processed onsite, particularly significant materials. To complete the materials inventory, the permittee must list materials that have been exposed to storm water in the past 3 years (focus on areas where materials are stored, processed, transported, or transferred and provide a narrative description of methods and location of storage and disposal areas, materials management practices, treatment practices, and any structural/nonstructural control measures.
- d. A list of significant spills and leaks of toxic or hazardous materials that have occurred in the past 3 years. "Significant spills" includes releases in excess of reportable quantities.
- A summary of any existing storm water sampling data and a description of the sample collection procedures
  used.
- f. A site evaluation summary The Site Evaluation Summary should provide a narrative description of activities with a high potential to contaminate storm water at the site, including those associated with materials loading and unloading, outdoor storage, outdoor manufacturing or processing, onsite disposal, and significant dust or particulate generating activities. The summary should also include a description of any pollutants of concern that may be associated with such activities.
- g. A narrative description of the following BMP's:
  - (i) Good Housekeeping Practices
  - (ii) Preventive Maintenance The permittee must develop a preventive maintenance program that involves inspections and maintenance of storm water management devices and routine inspections of facility operations to detect faulty equipment. Equipment (such as tanks, containers, and drums) should be checked regularly for signs of deterioration.
  - (iii) Visual Inspections Regular inspections shall be performed by qualified, trained plant personnel. Reports shall note when inspections were done, the name of the person who conducted the inspection, which areas were inspected, what problems were found, and what steps were taken to correct any problems.

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Dischel No. 980007-E1
FPL Witness R. R. LaBauve
Exhibit No.
Title: Permit for FPL Fort Everglades
Power Plant - Current
June 29, 1998
Page 6 of 8

Florida Power & Light Company Port Everglades Plant Post Office Box 13118 Fort Lauderdale, Florida 33316-3118 PERMIT NUMBER: FL0001538
ISSUANCE DATE: Draft
DATE: Draft
APPLICATION NO.: 280298

(iv) - Spill Prevention and Responses Areas where spills are likely to occur and their drainage points must be clearly identified in the BMP3 plan. Employees shall be made aware of response procedures, including material handling and storage requirements, and should have access to appropriate cleanup equipment.

(v) - Sediment and Erosion Control The BMP3 must identify activities that present a potential for significant soil crosion and measures taken to control such crosion.

(vi) - Management of Runoff The permittee must describe existing storm water controls found at the facility and any additional measures that can be implemented to improve the prevention and control of polluted storm water. Examples include: vegetative swales, reuse of collected storm water, infiltration trenches, and detention ponds.

6. Best Management Practices & Pollution Prevention Committee:

A East Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing, implementing, monitoring of success, and revision of the BMP3 plan. The activities and responsibilities of the Committee should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

7. Employee Training:

Employee training programs shall inform appropriate personnel of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, recordkeeping and reporting, spill prevention & response, as well as specific waste reduction practices to be employed. The plan shall identify periodic dates for such training.

8. Plan Development & Implementation:

The BMP3 plan shall be developed or updated 6 months prior to commercial operation and implemented upon commercial operation, unless any later dates are specified by the Department.

9. Plan Review & Modification:

If following review by the Permit Issuing Authority, or authorized representative, the BMP3 plan is determined insufficient, he/she may notify the permittee that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Permit Issuing Authority, or authorized representative, the permittee shall amend the plan and shall submit to the Permit Issuing Authority a written certification that the requested changes have been made. Unless otherwise provided by the Permit Issuing Authority, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by Permit Issuing Authority in the same manner as described above.

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FPL Witness R. R. LaBauve
Exhibit No.
Title Permit for FPL Port Everglades
Power Plant - Current
June 29, 1998
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Florida Power & Light Company Port Everglades Plant Post Office Box 13118 Fort Lauderdale, Florida 33316-3118 PERMIT NUMBER: FL0001538

ISSUANCE DATE:

DATE:

Draft Draft

APPLICATION NO.: 280298

# 10. Annual Site Compliance Evaluation:

Qualified personnel must conduct site compliance evaluations at appropriate intervals, but at least once a year. Compliance evaluations shall include:

- inspection of storm water drainage areas for evidence of pollutants entering the drainage system;
- evaluation of the effectiveness of BMP's:
- observations of structural measures, sediment controls, and other storm water BMP's to ensure proper operation;
- revision of the plan as needed within 2 weeks of the inspection, and implementation of any necessary changes within 12 weeks of the inspection; and
- preparation of a report summarizing inspection results and follow-up actions, identifying the date of
  inspection and personnel who conducted the inspection.

The inspection report shall be signed by the plant environmental engineering staff and plant management and kept with the BMP3 plan.

# 11. Recordkeeping and Internal Reporting:

For at least one year after the expiration of this permit, the permittee shall record and maintain records of spills, leaks, inspections, and maintenance activities. For spills and leaks, records should include information such as the date and time of the incident, weather conditions, cause, and resulting environmental problems.

# D. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

- Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe: [62-620.624(1)]
- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels:
  - (1) One hundred micrograms per liter,
  - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
  - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels:
  - (1) Five hundred micrograms per liter,
  - (2) One milligram per liter for antimony, or
  - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

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FPL Witness R. R. LaBauve
Exhibit No.
Title Permit for FPL Pon Everglades
Power Plant - Current
June 29, 1998

# FPL POWER PLANTS NPDES PERMIT ISSUANCE DATES & BMP3 SUBMITTAL DATES SUMMARY

FACILITY	ISSUANCE DATE	BMP3 DUE DATE
Port Everglades	November 1997	March 1998
Fort Lauderdale	January 1997	May 1998
Riviera	February 1998	June 1998
Fort Myers	April 1998	October 1998
Cape Canaveral	December 1998*	April 1999*
Sanford	March 1999*	July 1999*
Putnam	August 1999*	November 1999*
Cultler	March 1999*	July 1999*
Turkey Point	July 1999*	NA
Martin	July 1999*	November 1999*

Note: \* indicates an estimated date; permit issuance date is dependent on agency schedule; BMP3 due date is contingent on permit issuance date; the Plan must be implemented within a reasonable period of time after submittal.

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# NOAA Screening Guidelines for Inorganics

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Title: Analysed Water Quality Cintered June 29, 1998 Page Fol 2 14th Witness & R Laboury Exhibit No. Docket No 980007 ET

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## Quick Reference Cards

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Page 2 of 2 Tale: Ambient Water Quality Criteria Edilbit No. June 29, 1998

PALWHINGS R. R. LaBance

RKL-5



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

June 13, 1997

4WD-RCRA

#### VIA EXPRESS MAIL

Ms. Loretta Cranmer Florida Power & Light Company P.O. Box 14000 Juno Beach, FL 33408

SUBJ: Plant Fort Myers-Final RCRA Facility Assessment Report

Dear Ms. Cranmer:

In this letter, the United States Environmental Protection Agency (EPA) is transmitting the Final RCRA Facility Assessment (RFA) Report for the Plant Fort Myers (PFM) facility. This report was originally submitted by Florida Power and Light (FPL) to EPA on April 1, 1997, and has been modified by EPA. The Florida Department of Environmental Protection (FDEP) has notified EPA that it concurs with this Final RFA Report.

EPA has determined that the following Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) require a Remedial Facility Investigation (RFI):

- Former Ash Basins (SWMUs 30 and 31).
- Subsurface Release of No. 2 Diesel -Broken Transfer Line Southeast of Tank Farm (AOC N).

EPA is re-issuing the Final RFA Report for the PFM facility as an enclosure to this letter. In addition to changing the FPL-proposed classification of "No Further Action" (NFA) for SWMUs 30 and 31. EPA has revised the Final RFA Report in terms of format and content. The principal change has been to strike text originally included by FPL to support a position that none of the SWMUs or AOC require any further investigation. EPA believes that it is inappropriate to include such material in a technical report. However, several of the issues raised by FPL warrant our attention, and EPA is providing a response in the following paragraphs.

An RFI is required for releases which pose a potential threat to human health and the environment. In the proposed Subpart S corrective action rule (55 FR 30798, July 27, 1990), the Agency formulated an approach which relies on the exceedance of an action level to trigger further assessment. The action level specified for ground water in the proposed Subpart S rule is the maximum contaminant level (MCL) established for drinking water. However, EPA clarified in a subsequent Federal Register Notice that the action levels contained in the 1990 Subpart S

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Exhibit No.
Trile Letter from EPA Dated June 13, 597

June 29, 1978 Page 1 of 3 Proposed Rule were based on certain exposure pathways and land-use scenarios which may not apply to this situation (61 FR 19446. May 1. 1996). In particular, the use of MCLs as action levels for the release from the Ash Basins requires that the exposure to the hazardous constituent be via ingestion of contaminated groundwater. EPA is not aware of any human receptors using the groundwater over this portion of the facility as their source of drinking water.

At this facility, EPA considers the potential for ecological risk to be a far more significant pathway than the ingestion of groundwater and is basing the requirement for an RFI for these SWMUs on the potential environmental threats associated with releases from these units. EPA uses the Federal Ambient Water Quality Criteria (AWQC) as a screening tool for evaluating ecological risk via a surface water exposure pathway. As a screening step, it is intended to be conservative with respect to potential threats, with the understanding that additional study is necessary to more fully characterize the risk.

The Caloosahatchee River is a Class III Marine Water under the State of Florida's classification system. The chronic AWQC for nickel in saltwater, which is the ecological screening value applied by EPA for this facility, is 8.3 micrograms per liter (ug/l). The minimum reported concentration for nickel in groundwater downgradient of the Ash Basins is 17 ug/l, which is above the chronic AWQC for nickel. The maximum concentration of nickel found in groundwater at FPL's Fort Myers plant (80 ug/l) is above both the screening levels for both acute and chronic toxicity. It should also be noted that these concentrations represent current conditions after FPL removed the ash from the basins in 1995. It is EPA's position that these present values underestimate potential impacts to the surface water and sediment from past storage of boiler ash in these unlined basins dating back to 1958, and as such, constitutes sufficient basis for requiring an RFI for these units.

Therefore, EPA rejects those arguments set forth by FPL in the April 1, 1997 "Final Draft" RFA Report that maximum contaminant levels (MCLs) are the sole "action level" appropriate for determining whether releases to groundwater require further investigation. Furthermore, EPA has no records of an alleged "agreement" between EPA, FDEP, and FPL, that a "release" to the ground water was to be defined as any detection of a constituent above the MCL. Finally, it appears that the use of the National Oceanic and Atmospheric Administration (NOAA) Screening Guidelines for Inorganics has been taken out of context by FPL. EPA forwarded a copy of NOAA's guidelines to FPL for reference as these tables contain, arrong other criteria, the Federal Ambient Water Quality Criteria (AWQC) for surface water pollutants. In any case, the discussion provided by FPL in the April 1 Final Draft Report regarding NOAA's policies would appear to be irrelevant, since at the federal level it is EPA, not NOAA, who is primarily responsible for matters involving assessment of ecological risk at this facility.

If there are any questions, please contact me at (404) 562-8591

Sincerely.

Art Smith, P.E.

Enforcement and Compliance Branch Waste Management Division

Enclosure

cc Alex O'Wutaka, FDEP

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FPL Witness, R. R. LaBouve
Exhibit No.
Title Letter from EPA Dated June 13, 1997
June 29, 1998
Page 3 of 3





(305) 372-6817

ENVIRONMENTAL RESOURCES MANAGEMENT WASTE MANAGEMENT DIVISION SUITE 800 33 S.W. 2nd AVENUE MIAMI, FLORIDA 33130-1540

File# 5802

MULTIPLE SOURCE ANNUAL OPERATING PERMIT

PERMITTEE: Ms. Ada Bill

FLORIDA POWER & LIGHT P.O. BOX 025209 MIAMI, FL 331025209

MULTIPLE SOURCE PERMIT NUMBER: MSP-00010-97

DATE ISSUED: October 22, 1997

EFFECTIVE DATE: October 1, 1997 EXPIRATION DATE: September 30, 1998

LOCATION:

FLORIDA POWER & LIGHT TURKEY POINT/LAND UTILIZATION

SW 87 AVE/384 ST FLORIDA CITY, FL 33035

SPECIFIC SOURCE TYPES INCLUDED IN THIS PERMIT:

INDUSTRIAL WASTE IW 00016 INDUSTRIAL WASTE 5 IW5 06229 STORAGE TANKS UT 02324 MARINE FACILITIES MOP 00072 STRATOSPHERIC OZONE APCF 01747

Should you have any questions regarding this permit, you may contact Sebastian Acosta at (305) 372-6819, or via the Internet (acosts@itd.metro.co.dade.fl.us).

METROPOLITAN DADE COUNTY DEPARTMENT GF ENVIRONMENTAL RESOURCES MANAGEMENT

John W. Renfrow, P.E., Director

RRL-7
Docket No. 980007-EI
FPL Witness R. LaBauve
Exhibit No.
Title Multiple Source Annual Operating Permit
June 29, 1998
Page I of 14





**ENVIRONMENTAL RESOURCES MANAG** POLLUTION PREVENTION DIVISION

INDUSTRIAL WASTE TYPE 0-4 ANNUAL OPERATING PERMIT

33 S.W. 2nd AVENUE

MIAMI, FLORIDA 33130-1540 (305) 372-6817

PERMITTEE:

Mo. Ada Bill

PLORIDA POWER & LIGHT

P.O. BOX 025209

MIAMI, PL 331025209

PAGE 1 OF 2

PERMIT No. :

IW-00016 (4)/MSP-00010-97 08

SOURCE NAME: PLORIDA POWER & LIGHT

TURKEY POINT/LAND UTILIZATION

LOCATION:

SW 87 AVE/384 ST

PLORIDA CITY, PL 33035

#### DESCRIPTION OF PACILITY/BOXITEMBET:

306 GPD Boiler Makeup Water Treatment System for Electrical Power Generating Facility with two (2) fossil fuel units and two (2) nuclear units including:

A. Water Treatment Units with effluent discharge to the intake canal of the closed cooling canal system with the following features.

1. Multi-media filters (MMF) and a decarbonator;

2. Triple membrane trailer (TMT) consisting of the following: a) Utrafiltration (UF) and Reverse Osmosis (RO):

b) Electrodeicaisation (HDI) and Mixed Bed Demineralizers (DI);

c) Two (2) Condensate Storage Tanks (CST);
d) Reject water (filter backwash, ultrafiltration, reverse osmosis and mixed bed demineralizing) to be disharged to an existing storageter catch besin which discharges to a stora drain pipe.

3. One (1) 1500 gallon above ground sulfuric acid tank secondarily contained within a beavy duty

polyethylene system.

S. Two (2) Solids Settling Basins (170' x 50' x 7.8' each) with 25,000 GPD discharge to closed cooling canal system. Basins receive the following:

1. Boonomizer hopper waste.

2. Dust collector cleaning waste.

3. Air pre-bester wash, boiler fireside wash, and stack wash.

4. Cil/water separator wastes.

Items C and D listed below serve as an emergency backup system for the boiler makeup water treatment described in item A.

C. Neutralization Basin (75° X 115° X 5') for wastewater treatment with 100,000 GPD effluent discharged to closed cooling canal system. Basin ruceive the following:

 Demineralization wastes;

2. Carbon filter backwash.

D. Two (2) totally enclosed treatment facility (TETF) tanks as follows:

1. 85,000 gallon imperviously contained (containment irregular in shape, 2' high) waste neutralization tank (nuclear mite)

2. 15,000 gallon waste neutralization tank (fossil site).

- E. Oil drum and compressed gases storage facility (net volume containent of 11.83) gallon) with the following features (suclear site):
- Continuous comerete trench drain (71° X 3°), followed by one (1) three (3) inch spring loaded velve;
   One (1) 750 gallon oil/water separator;

3. DERN approved sampling port (tee type).

G: Hazardous waste storage room (24' X 20') and used oil containment area (40' X 22.75' X 0.33' high) both located within the fossil plant.

section Approved: 438. Suite

RRL-7 Docket No 980007-E1 FPL Witness R. R. LaBauve Exhibit No .. Title Multiple Source Annual Operating Permit June 29, 1998 Page 2 of 14

## SPECIFIC COMMITTONS:

- Mazardous waste, sludge and other industrial wastes and/or wastewater must be transported by DEEM approved transporters. Analytical data must be submitted to DEEM, for all waste and/or wastewater that is disposed of locally. Failure to gain approved from DEEM, for disposed, will result in rejection of your waste at the disposed facility.
- 02 A monthly report of operations shall be submitted to this Department on or before the 15th of the following south including: copies of manifests and/or receipts of all hazardous wasts, industrial wast and/or wastswater dispused of. Information shall include name of hauler, volume and final destination become shall be hopt on the premises to be presented upon request. 93570
- 2 a scathly report of operations shall be subsitted to this Department following south including: buttore the 15th of
- Average delly wastewater flow (gals). Analytical data from a certified labor
- enterry for pff. Pb. Cr. Cd. Cu and In from the solids settling
- hasin efficient.

  J. Amount of sludge disposed of, mass of hauler and final destination.

  Please rafer to the enclosed munitoring program.
- Spills must be reported to this Department (372-695%) no later than Sour (4) hours after conturence and a written report submitted to this Department within the Sellewing seventy-two (72) have describing the nature of the spill and staps taken to prevent future occurrences.
- 8 The Department of Environmental Resources Samagement requires the submittal of a formal Closure Plan to insure the proper removes/disposal of all hemorelous/new-hassaless materials and/or wasted stored on site. The Closure Plan must be submitted for review and approval, a minimum of thirty (30) days prior to the cessation or relocation of spurations. Please call 372-6600 for information on requirements.
- All large quantity generators (199's) and transfer facilities must store their ignitable or reactive wastes at least 50 fact from the hearest property line as specified in 40 CPR 265-176.
- 3 If at any time these facilities are found to be performing inidequately, the owner must provide improvements to the operating techniques and/or additional equipment to operate in compliance wasplicable regulations. outs days

## T CONDITIONS:

- 2 the applicant, as to comply w t. by acceptance of this dominant, egrees to operate and maintain the subject operation at with the regularments and standards of Chapter 24 of the Code of Matropolitan Dade County.
- If for any messen, the applicant does not comply with or will be unable to emply with any condition or instantian specified on this document the applicant shall immediately notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the paried of non-compliance including sourt dates and times; or, if not corrected, the enticipated time the non-compliance is expected to continue, and stops taken to reduce, climinate, and prevent recurrence of the non-compliance. The applicant shall be responsible for any end all damages which may result and may be subject to enforcement action by the department for paralties or paralties of this document.
- As provided in Section 24-30 of the Code of Makropolitan Rade County, the prior written approval of the Department of Environmental Resources Management shall be obtained for any alteration to this facility.
- Ľ The instance of this denument dome not convey any vested rights or any exclusive privileges, it authorize any indusy to public or private property or any invasion of parsonal rights, no infringement of Sedemal, state or local laws or regulations. Mor does it relieve the applicationality for harm or injury to busen bealth or velfare or property. rights, sor any
- Z This dominent is required to be posted in a communicator it the pollution control facility site during the entire period of operation.
- t This document is not wransforming. Open sale or legal transfer of the property or facility covered by this document, the applicant shall swiffy the department within thirty(30) days. The new owner cast apply for a permit within thirty (30) days. The applicant shall be liable for any non-convision of the source until the transformer applies for and receives a transforment.
- ŗ The applicant, by acceptance of this document, specifically agrees to allow access to the mased source at reasonable times by department personable presenting credentials for the purposes of inspection and testing to devermine compliance with this document at department rules.
- 5 This document does not indients a waiver of or approval of any other deprepared for other aspects of this facility. ant parait that may be

Title: Multiple Source Annual Operati June 29, 1998 Page 3 of 14 Exhibit No Docket No 980007-E1 PPL Witness R R LaBauve





### IMPUSTRIAL AMBUAL OPERATIEG HASTE TYPE PERMIT 0

1 . POLLUTION PREVENTION DIVI MIAMI, FLORIDA 33130-1 (306) 372-6817

MIAMI. PL 331025209 P.O. BOX 025209 PLORIDA POWER & LIGHT Ms. Ada Bill

PERMITTEE:

SOURCE NAME: PERMIT NO. 1 PAGE 2 OF 2 PLORIDA POWER & LIGHT TURKEY POINT/LAND UTILIZATION IN-00016 (4)/MSP-00010-97 08

PLORIDA CITY, PL 33035

LOCATION: N SS 87 AVE/384 ST

This document does not constitute an approval by DERM or certification that the applicant is in compliance with applicable laws, ordinances, rules or regulations. The applicant acknowledges that separate enforcement actions may be initiated by DERM and that this document does not constitute compliance with orders issued in conjunction with enforcement actions for correction of violations.

5 Failure to comply with any condition of this document, or the standards as set forth in Chapter 24. Code of Hetropolitan Dade County may subject the applicant to the penalty provisions of said Chapter including civil penalties up to \$25,000 per day per offense and/or criminal penalties of \$500 per day and/or sixty (60) days in jail.

Docket No. 980007-El PPL Witness R. R. LaBauve Exhibit No. Title Multiple Source Annual C June 29, 1998 Page 4 of 14 RRL-7



#### INDUSTRIAL WASTE OPERATING REPORT FORM

CONTACT NAME: Ms. Ada Bill MAILING NAME: FLORIDA POWER & ADDRESS: P.O. BOX 025209 MIAMI, FL 33102520	LIGHT DATE						
FACILITY: FLORIDA POWER & LIGHT TURKEY POINT/LAND UTILIZATION LOCATION: SW 87 AVE/384 ST FLORIDA CTTY, FL 33035							
REPORTING FREQUENCY AND PA (Indicate which report period is being abunits	RAMETERS REQUIRED ed by checking the appropriate box and indicating the date)						
Monthly report Due before the 15th grease, FLPRO, Pb, Zn and pH of the	h of the following month for: Waste water flow, oil & effluent from OS#2.  REPORT PERIOD:						
Attach laboratory analysis reports							
An annual report of groundwater quality oil & grease from the monitoring wells Attach laboratory analysis reports	REPORT PERSOD:						
An annual report due on or before FLPRO from the oil water separator le Attach laboratory analysis reports	December 15 for: EPA Methods 602's and 610's and ocated in the fuel dispensing area (nuclear plant).  REPORT PERIOD:						
AVERAGE DAILY WASTEWATER FLA	OW:GPD (gallons per day)						
** Please attach proof of disposal							
I hereby certify that, to the best of my are true, accurate and complete.	knowledge, this document and all the attachments						
	authorized Representative or Corporate Official						

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Docket No. 980007-El
FPL Witness: R. R. LaBauve
Exhibit No.
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**ENVIRONMENTAL RESOURCES MANAGEMENT** 

STRATOS PHERIC OZOHE PROTECTIONSTE MANAGEMENT DIVISION AMBUAL OPERATING PERMIT

33 S.W. 2nd AVENUE MIAMI, FLORIDA 33130-1540 (306) 372-6817

PERMITTEE:

Ms. Ada Bill

PLORIDA POWER & LIGHT

P.O. BOX 025209

MIAMI. PL 331025209

PAGE 1 OF 1

PERMIT No.: APCF-01747 (NC)/MSP-00010-97 NR 08

SOURCE NAME: FLORIDA POWER & LIGHT

TURKEY POINT/LAND UTILIZATION

LOCATION

SW 87 AVE/184 ST

FLORIDA CITY. FL 33035

DESCRIPTION OF FACILITY/SQUIPMENT:

Two Thermaflo Recovery unit(s) model OZ Saver 4000

NRP Recovery unit(s) model V1

The permittee is authorized to purchase R-12, R-22 and R-502 refrigerant(s) for use during service and repair of air conditioners, refrigerators, freezers and chillers. In addition, they are authorized to purchase said refrigerants from DERM approved distributors. Bulk sale of refrigerants is not authorized; only sale of refrigerant by the pound during repair and service is acceptable.

#### SPECIFIC CONDITIONS:

- 01 The permittee, by acceptance of this document, agrees to operate and maintain the subject operation so as to comply with the requirements and standards of Section 609 of Title VI of the Clean Air Act of 1990 and 57CFR31241 in addition to the applicable Dade County regulations.
- 02 This document is an authorization to handle refrigerant products in Dade County. This does not reflect competency in air conditioning, refrigeration or any other trade.
- 03 Releasing refrigerant into the atmosphere during installation, service, repair salvage, or dismantling of any appliance (including, but not limited to, air conditioners, refrigerators, chilers & freezers) is prohibited. Refrigerant must be recovered/recycled or recovered only using USEPA approved equipment and stored in DOT approved containers for subsequent reclamation. Exceptions to this venting prohibition are covered under Section 608 of the Clean Air Act.
- 04 Recovery/Recycling equipment must be properly maintained to ensure continued operating efficiency of at least 90% refrigerant recovery.
- 05 Equipment that is dismantled on-site must have the refrigerant recovered in accordance with EFA requirements prior to disposal. After removal of the refrigerant, a sticker shall be attached to the unit stating:
  - i. the permittee mass, address and phone number ii. the DERM permit number iii. the date of refrigerant removal

Allabory

- 06 Records regarding the service and repair of air conditioning, refrigeration and small appliances containing refrigerants must be maintained for a period of at least two years. Such records shall include, but not be limited to, the date of repair or service, name and address of customer whose unit was service; amount of refrigerant recovered/recycled. location and address of the reclaiming facility where the refrigerant was sent for reclamation, date and invoices for the transaction of recovered refrigerants. Buch records must be presented to DERM inspectors for review and copies of such records must be provided to DERM upon request.
- 07 Technicians who handle refrigerant products during installation, service, repair, maintenance or salvaging must meet EPA's technician certification requirements.

Section Approval:

RP1.7 Docket No 980007-EI FPL Witness R R LaBauve Exhibit No.

Title: Multiple Source Annual Operating Perput June 29, 1998

Page 6 of 14

#### GENERAL CONDITIONS

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**ENVIRONMENTAL RESOURCES MANAGEMENT** WASTE MANAGEMENT DIVISION SLITTE 800

33 S.W. 2nd AVENUE MIAMI, FLORIDA 33130-1540 (306) 372-6817

#### INDUSTRIAL WASTE AMBUAL OPERATING PERMIT

PERMITTEE:

Ms. Ada Bill

FLORIDA POWER & LIGHT

P.O. BOX 025209

MIAMI. PL 331025209

PAGE 1 OF 2

PERMIT No.: IW5-06229 (AP) /MSP-00010-97 CETO 08

SOURCE NAME: FLORIDA POWER & LIGHT

TURKEY POINT/LAND UTILIZATION

LOCATION. SW 87 AVE/384 ST

FLORIDA CITY, PL 33035

#### DESCRIPTION OF FACILITY/BOULFMENT:

Fleet operator generating waste oil, coolant, and used batteries, with solvent wash tank, some with steam cleaning effluent; served by septic tank.

#### SPECIFIC CONDITIONS:

- 01 All wastes from facility operation shall be stored or disposed of in compliance with county, state and federal regulations.
- 02 Facility shall have the ability to contain and collect any spill and properly dispose of contaminated materials. Accidental spills must be immediately reported to this department within 24 hours at 372-6789.
- 03 Waste oil, transmission fluids, brake fluids, solvents, sludges, chemicals, or other industrial wastes must be collected and placed in a secure location. These materials shall be disposed of in an approved manner by Pade County permitted haulers only.
- 04 Receipts from all industrial waste and/or wastewater disposal must be maintained at the business and be available for inspection by DEDM personnel. Receipts shall contain clear information as to the name of the hauler, type of material transported, and quantity of material picked up. Records shall be kept for a period of three years.
- 05 Hazardous wastes shall not be stored longer than ninety (90) days, for generators, or one hundred eighty (180) days for small quantity generators, containers must be clearly labelled, and must have the date of the first day of storage marked on the outside of the container.
- 06 Do not discharge used coolant, flush out or test tank waters into septic tanks, storm drains, scalage pits, or onto ground surface. At present, used coolant that is not recycled shall be collected and profiled for proper disposal.
- 07 Used batteries shall be kept indoors, or an impervious covered area sheltered form the elements, Return unwanted batturies to suppliers or reclaimers promptly. Reciepts for disposals should be made available and kept for a period of three (3) years.
- 08 All above ground tanks and storage areas for hazardous materials and hazardous waste must have secondary containment. Design and construction must have departmental approval.
- 09 If at any time pollution control facilities or procedures are found to be performing inadequately, the owner must provide immediate improvements to the operating techniques and/or additional equipment in order to operate in compliance with applicable regulations. Additionally, any significant changes in facility operations, processes or inventory of materials must be reported to this office in writing within 10 days.
- 10 Industrial liquid waste discharges must meet Dade County Standards.

Section Approval: (Lu - W. ) - And

RRL-7 Docket No. 980007-E1 FPL Witness: R. R. LaBouve Exhibit No. Title: Multiple Source Annual Operating Permit June 29, 1998 Page 8 of 14

- 11 Used oil filters must be collected and handled by a permitted hauler or recycler. These filters cannot be disposed in the trash as solid waste.
- 12 Any septic tank located at the subject property shall be provided with access for the purpose of sampling and monitoring by DERM inspectors at any time during reasonable working hours.
- 13 Rags used in cleaning processes and contaminated with hazardous materials (ie. solvents, inks, oils & grease) must be recycled by an approved rag service or handled as hazardous waste unless proven otherwise by a hazardous waste profile.
- 14 The permittee, by acceptance of this certification, agrees to maintain the subject operation so as to comply with the requirements and standards of Chapter 24 of the Code of Netropolitan Dade County, the Florida Administrative Code 17-281, Section 609, Title VI of the Clean Air Act of 1990 and 57CFR11241.
- 15 Refrigerant must be recovered/recycled or recovered only using USEPA approved equipment. Release of refrigerant into the atmosphere during installation, service, repair, salvage, or dismentling air conditioners is prohibited. For further information regarding Dade County's Stratospheric Osone Protection Program, please contact Air Section staff of DERM's Air Quality Management Division at (305)372-6925.
- 16 THIS PERMIT ALSO ANYHORIZES THE PERMITTET TO PURCHASE REPRIGERANT R-12, CONTINUENT UPON PROOF THAT THE PERMITTEE HAS OBTAINED FEDERAL ENVIRONMENTAL PROTECTION ACROSY (EPA) APPROVED TECHNICIAN CERTIFICATION FOR REPRIGERANT RECOVERY IN AUTOMOBILE AIR CONDITIONERS.
- 17 Maintain records indicating the date, name and address of clients whose motor vehicle air conditioners were serviced. Records must be maintained on-site for at least three (3) years for spot checks by DEEM representatives.
- 18 Only properly trained and certified technicians may perform service on motor vehicle air cond'tioners as outlined in applicable County, State and Federal regulations.

#### GENERAL CONDITIONS

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ENVIRONMENTAL RESOURCES MANAGEMENT WASTE MANAGEMENT DIVISION

ANNUAL OPERATING PERMIT

INDUSTRIAL

SUITE 600 33 S.W. 2nd AVENUE MIAMI, FLORIDA 33130-1540 (305) 372-6817

PERMITTEE:

Ms. Ada Bill

FLORIDA POWER & LIGHT

P.O. BOX 025209

MIAMI, PL 331025209

PAGE 2 OF 2

WASTE

PERMIT No.: IW5-06229 (AP)/MSP-00010-97 CETO 08

SOURCE NAME: FLORIDA POWER & LIGHT

TURKEY POINT/LAND UTILIZATION

LOCATION: SW 87 AVE/384 ST

PLORIDA CITY, PL 33035

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FPL Witness, R. R. LaBauve
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ENVIRONMENTAL RESOURCES MANAGEMENT

WASTE MANAGEMENT DIVISION

33 S.W. 2nd AVENUE MIAMI, FLORIDA 23130-1540 (305) 372-6817

#### MARINE PACILITIES

AMBUAL OPERATING PERMIT

PERMITTEE:

Ms. Ada Bill

FLORIDA POWER & LIGHT

P.O. BOX 025209

MIAMI. PL 331025209

PAGE 1 OF 1

PERMIT No. : MOP-00072/MSP-00010-97 B 08

SOURCE NAME: FLORIDA POWER & LIGHT

TURKEY POINT/LAND UTILIZATION

LOCATION: 9700 SW 344 ST , land utili

PLORIDA CITY, PL 33035

DESCRIPTION OF FACILITY/EQUIPMENT:

Commercial Facility.

Pueling Pacilities.

Total wet slips: 1

Total dry slips: 1

Total commercial vessels: 2 Total recreational vessels: 0

Number of liveaboards: 0

Days of week in operation: 7

SPECIFIC CONDITIONS:

- 01 This facility must be operated in accordance with the "Best Management Practices" attached hereto.
- 02 All applicable conditions from previously executed local, state, and federal permits issued for the above-referenced marine facility shall be enforced. These include, but are not limited to such conditions as, sewage pumpout station requirements, liveaboard prohibitions and/or sewage hook-up requirements, fuel spill cleanup materials, and resource protection requirements.
- 03 Harassment of manatees is prohibited. Harassment includes, but is not limited to, feeding, watering, physics\ contact, and/or any interference in their normal behavior or movements.
- 04 All fixed or floating non-water dependent structures in, on, over, or upon tidal waters, unless previously approved by a Class I permit, are prohibited.

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Section Approval: To: Was

RRL-7 Docket No. 980007-E1 FPL Witness R R LaBauve Exhibit No.

Title: Multiple Source Annual Operating Permit June 29, 1998 Page 11 of 14

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# STORAGE TAMES

ANNUAL OPERATING PERMIT

ENVIRONMENT AL RESOURCES MANAGEMENT DIVISION VASTE MANAGEMENT DIVISION SUITE 800 M I T MANAGEMENT BOOM 33 S.W. 2nd AVENUE MANAMI, FLORIDA 33130-1840 (305) 372-8817

PERMITTEE:
Ms. Adm #111
PLORIDA POWER & LIGHT
P.O. BOX 025209
NIAMI, FL 331025209

PAGE 1 OF 1
PERMIT NO.: UT-02324/MSP-00010-97 08
SOURCE NAME: PLORIDA POWER & LIGHT

TURKEY POINT / LAND UTILIZATION 9700 SW 344 ST , land utili FLOWIDA CITY FL 33035

LOCATION:

DESCRIPTION OF PACILITY/EQUIPMENT:

location. permittee, is hereby authorized to operate 2 underground storage facility(:::s) at the above

## SPECIFIC CONDITIONS:

- Notify this Department within four (4) hours after discharge/detection of basardous material(s), regardless of quantity, into the environment outside of the permitted facility.
- Maintain daily inventory of hazardous material stored and transmitted
- 8 The underground storage facilities specially authorized by this permit are tank(s) numbered: 2
- A metrix consisting of 7 monitoring wells installed as approved by the Department of Environmental Resources Management shall be maintained in an operative condition. Said wells shall be accessible for inspection, by this Department during normal operating hours, which may include obtaining a groundwater easple(s).
- 8 Each monitoring well shall be visually tested for hazardous material at least once per week. Test results must be recorded, maintained on site and be made available to this Department upon request.
- Monitoring well(s) must be equipped with a locking watertight cap marked in accordance with API RP 1615 and be kept locked at all times except when being eampled.
- 9 All plans submitted to this Department shall be signed and sealed by a professional engineer registered in the stat: "Florida, including plans for the installation, modification, repair, expansion or replacement numberground storage facility(iss) or to comply with any of the requirements of Chapter 76, Code of politan Dade County, Florida, Said plans shall be submitted to this Department for voritten apper. Chapter
- A hydrostatic test must be performed for any underground storage facility which has been installed modified, repaired, expanded or replaced prior to placing the underground storage facility back in

## GENERAL COMPITIONS:

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Section Approved & Thomas of

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CODE of METROPOLITAN DADE COUNTY, FLORIDA Codified through Ord. No. 97-198, adopted November 4, 1997. (Supplement No. 22)
PART III CODE OF ORDINANCES
Chapter 24 ENVIRONMENTAL PROTECTION\*
ARTICLE I. IN GENERAL

...previous

Sec. 24-11. Prohibitions against water pollution.

- (1) PROHIBITIONS AGAINST DISCHARGE. It shall be unlawful for any person to throw, drain, run or otherwise discharge into any of the waters of this County, or to cause, permit or suffer to be thrown, run, drained, allowed to seep, or otherwise discharged into such water any organic or inorganic matter which shall:
- (a) Breach the values set forth in Section 24-11(2);
- (b) Cause water pollution as herein defined; or
- (c) Cause a nuisance or sanitary nuisance as herein defined.
- (2) EFFLUENT STANDARDS FOR DADE COUNTY. All sewage treatment plants and industrial waste treatment plants (except those discharging to approved ocean outfalls) shall effect ninety (90) percent treatment or better at the defined sampling point (24-11(5)(a)). However, in no case shall the following effluent standards be exceeded (except where the standard is noted to be a minimum).

Chemical, Physical, Standard or Biological Characteristic

Dissolved oxygen Not less than 2.0 mg/l

Suspended solids 40 mg/l

Biochemical oxygen demand 30 mg/l

Floating solids None visible to the naked eye

pH 6.0--8.5

Settleable solids Not greater than 0.1 mg/l on Imhoff cone 1 hr. test

Oil and grease 30 mg/l

Odor-producing substances None attributable to sewage or industrial wastes

Temperature

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Sources permitted after July 1, 1972

Fresh water 92°F

<u>Salt water</u> (June-September) <u>92°F</u> (October-May) 90°F

Turbidity 29 NTU above background

Chlorides 500 mg/l1

Chromium

Hexavalent .5 mg/l

Total 1.0 mg/l

Copper .5 mg/l

Cyanides 0.01 mg/l

Color Not more than 10 units above normal background of the receiving water

Foam Effluent shall not cause foaming in the stream

Chlorine Minimum residual level of .5 mg/l after a 1/2 hour contact time at peak flow, where the nature of the waste requires disinfection

LAS 6.0 mg/l

Mercury None detectable

Lead 0.05 mg/l

Arsenic .05 mg/l

Phenol 0.001 mg/l

Iron .3 mg/l

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Zinc 1.0 mg/l

Sulfides 0.2 mg/l

Coliform organisms

(MPN 100 ml) 1,000 total 0 Fecal

Other compounds Other toxic or undesirable compounds than those listed above may occur in individual waste streams.
Limits for these components may be specified by the pollution control officer based on the latest scientific knowledge concerning toxicity and adverse effects on the intended water use

Synergistic action Whenever scientific evidence indicates that a combination of pollutants exert a greater effect than the individual pollutants, the pollution control officer may, on the basis of these findings, lower the herein established limits to the level necessary to prevent damage to the waters of the county

IIn waters other than fresh water, waste shall not increase natural background more than ten (10) percent.

- (3) DISCHARGES AFFECTING WATER QUALITY AND PROGIBITION OF POSITIVE DRAINAGE. It shall be unlawful for any person to dewater or to discharge sewage, industrial wastes, cooling water and solid wastes, or any other wastes into the waters of this County, including but not limited to surface water, tidal salt water estuaries, or ground water in such quantities, and of such characteristics as:
- (a) May cause the receiving waters, after mixing with the waste streams, to be of poorer quality than the water quality standards set forth in Section 24-11(4);
- (b) To cause water pollution as defined in Section 24-3(74); or
- (c) To cause a nuisance or sanitary nuisance as herein defined.

It shall be unlawful for any County or municipal officer, agent, employee or board to approve, grant, or issue any permit, or permit, allow, let or suffer the approval or issuance of any permit, which authorizes positive drainage without the prior written approval of the director or his designee. The director or his designee shall issue a written approval only if the director or his designee determine, after reviewing data submitted by the applicant, that one or more of the following conditions exist at the subject site:

- (d) Inadequate size, shape or topographic characteristics of the site to provide full on-site disposal of stormwater.
- (e) Extremely poor soil seepage capacity which prevents full on-site disposal of stormwater.

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(f) An existing groundwater contamination plume under or in the vicinity of the subject site which will be adversely impacted by full on-site stormwater disposal.

#### (4) WATER QUALITY STANDARDS FOR DADE COUNTY:

Chemical, Physical Fresh Water Tidal Salt Water Groundwater or Biological
Characteristic (water containing (water containing less more than 500 ppm than 500 ppm chlorides)

Dissolved oxygen 5 ppm during at least 10 hours per 24-hour period, never less than (mg/l) 4 ppm, unless acceptable data indicate that the natural background dissolved oxygen is lower than the values established herein.

Biochemical oxygen Shall not exceed a value which would cause dissolved oxygen to demand (mg/l) be depressed below values listed under dissolved oxygen and in no case shall be great enough to produce nuisance conditions.

pH 6.0--8.51 6.0--8.51 6.0--8.51

Floating solids, None attributable to None attributable to — settleable solids, sewage, industrial sewage, industrial sludge deposits wastes or other wastes, or other wastes. wastes.

Oil and grease (mg/l) 152 152 152

Odor-producing None attributable to sewage, industrial wastes, or other wastes. substances Threshold odor number not to exceed 24 at 60°C as a daily average.

Temperature

Sources permitted Shall cause no environmental damage. prior to July 1, 1972

Sources permitted 3° above ambient. (June--September) -after July 1, 1972 2° above ambient.
(October--May) 4°
above ambient.

Turbidity 29 NTU above background

Ammonia (mg/l) .5 ppm as N .5 ppm as N .5 ppm as N

Chlorides (mg/l) 5003 3 5003

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Chromium (mg/l) .05 .05 .05 total

Copper (mg/l) 0.4 0.4 0.4

Cyanides (mg/l) None detectable None detectable None detectable

Detergents (mg/l) 0.5 Insufficient to cause 0.5 foaming

Fluoride (mg/l) 1.4 as F 10 as F 1.4 as F

Lead (mg/l) 0.95 0.35 0.05

Phenol (mg/l) 0.001 0.005 0.001

Zinc (mg/l) 1.0 1.0 1.0

Sulfides (mg/l) 0.2 1.0 0.2

Coliform organisms 1,0004 1,0005 50 (MPN/100 ml)

Mercury None detectable None detectable None detectable

Iron 0.3 mg/l 0.3 mg/l 0.3 mg/l

Arsenic 0.05 mg/l 0.05 mg/l 0.05 mg/l

Specific conductance 500 micromhos per cm (fresh water). Not more than 100% above background, in waters other than fresh.

Dissolved solids Not to exceed 500 mg/l for monthly average or 1000 mg/l at any time.

Radioactive Gross beta activity (in known absence of strontium 90 and alpha substances emitters), not to exceed 1000 micro-microcuries at any time.

Other compounds Other toxic or undesirable compounds than those listed above may occur in individual waste streams. Limits for these components may be specified by the Pollution Control Officer based on the latest scientific knowledge concerning toxicity and adverse effects of the intended water use.

Synergistic action Whenever scientific evidence indicates that a combination of pollutants exert a greater effect than the individual pollutants, the Pollution Control Officer may, on the basis of these finding s, lower the herein established limits to the level necessary to

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prevent damage to the waters of the county.

1 Shall not cause the pH of the receiving waters to vary more than 1.0 unit. When the natural background pH lies outside the limits established, the introduction of a waste shall not displace the pH of the receiving waters more than 0.5 pH units from these standards.

2Shall not be visible, defined as iridescence, or cause taste or odors.

next...



### PART III CODE OF ORDINANCES Chapter 24 ENVIRONMENTAL PROTECTION\* ARTICLE I. IN GENERAL

Sec. 24-11. Prohibitions against water pollution.

...previous

3Waste shall not increase natural background more than 10 percent.

4Maximum MPN/100 ml in a surface water used as a drinking water supply shall be 100.

5Maximum MPN/100 ml in a tidal water from which shellfish are harvested for human consumption shall be 70.

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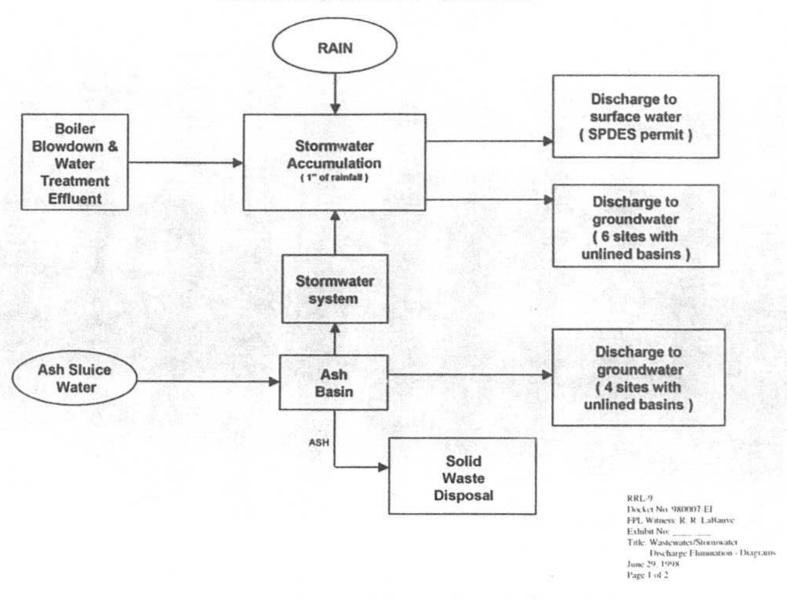
- (5) COMPLIANCE TESTS. Sampling points to determine compliance with Section 24-11 shall be selected as follows:
- (a) Effluents. For compliance with the effluent standards in Section 24-11(2) and the pretreatment standards in Section 24-11(9) the samples shall be taken at the point past which no further treatment is given by the facility to the waste. An outfall line shall not be considered as further treatment. In facilities which have sand filter beds where the effluent percolates directly into the soil and no approved sampling points are provided, the samples will be taken before the sand filter and a five (5) percent overall reduction of the effluent sewage will be allowed.
- (b) Sampling stations may be required to be installed if reasonable access is not available, as determined by the Director, Environmental Resources Management.
- (c) Surface water and tidal salt water. The sample for compliance with the water quality standards of Section 24-11(4) should normally be taken at a point at least fifty (50) feet from the point of discharge of the waste stream; where possible the samples should be taken upstream and downstream from the point of discharge.
- (d) Groundwater. For compliance with Section 24-11(4) samples shall be taken from wells nearest to and encircling the point of entry of a waste stream into the ground water table. Test wells may be required to be installed and maintained if existing sampling points are found to be inadequate in the judgment of the Director, Environmental Resources Management.
- (e) Methods. Determination of plant efficiency and percent removal of BOD and suspended solids shall be based on the average of three (3) eight-hour composite samples taken on three (3) consecutive days. At least one (1) peak flow period should be included in each eight-hour period. Composite sampling devices will be required. Determination of the effluent values as set forth in Section 24-11(2) will be based on individual, not composite, samples. Field testing, sample collection and preservation, and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department of Environmental Resources Management or as published in the sixteenth edition of Standard Methods for the Examination of Water and Wastewater or the following methods:
- (i) 40 CFR 136, 49 FR 43234, October 26, 1984.
- (ii) 40 CFR 136, 40 FR 690, January 4, 1985.
- (iii) EPA SW-846 Test Methods for Evaluating Solid Waste, November, 1986.
- (iv) EPA-600/4-79-020 Methods for Chemical Analysis of Water and Wastes, March, 1979.
- (v) EPA Methods 502.1, 502.2, 503.1, 504, 505, 507, 508, 515, 524.2, Environmental Monitoring and Support Laboratory, September, 1986.
- (vi) EPA-600/4-85/054 Method 531.
- (6) RESERVED.
- (7) TERTIARY TREATMENT REQUIREMENTS. All new sewage treatment plants and industrial liquid waste

treatment facilities, except those discharging to approved ocean outfalls or deep disposal wells, shall provide for nutrient removal and the following:

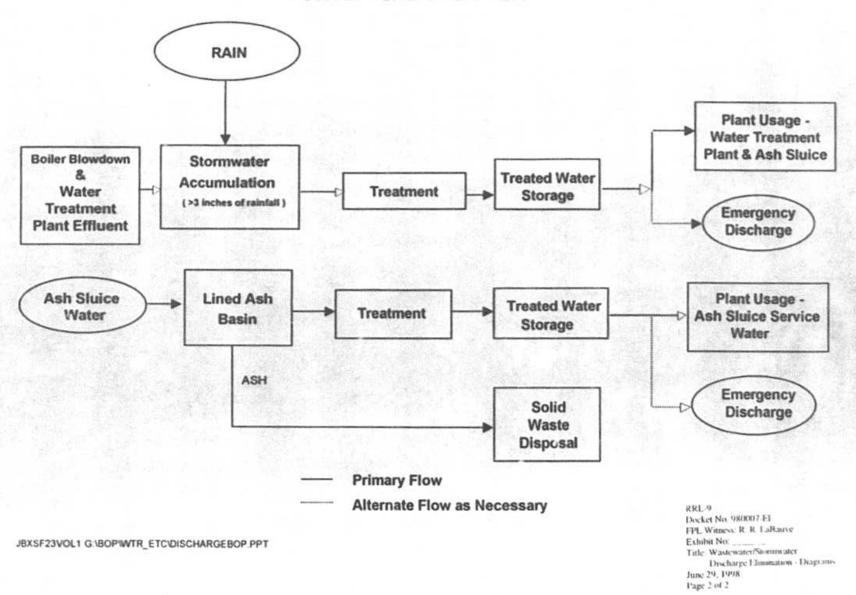
- (a) Ninety-five (95) percent removal of the influent biochemical oxygen demand (BOD) concentration which will result in an effluent concentration which shall not exceed 15.0 mg/l.
- (b) Ninety-five (95) percent removal of the influent total suspended solids (TSS) concentration which will result in an effluent concentration which shall not exceed 15.0 mg/l.
- (c) Effluent discharged to surface waters shall not exceed 3.0 mg/l of methylene blue active substance (MBAS).

next...

### WASTEWATER / STORMWATER DISCHARGE ELIMINATION CURRENT SITUATION - GENERAL



### WASTEWATER / STORMWATER DISCHARGE ELIMINATION CONCEPTUAL OVERVIEW



## • FPL WASTEWATER & STORMWATER DISCHARGE ELIMINATION PROJECT SCOPE OF WORK BY SITE

FACILITY	LINE ASH BASINS	LINE STORM- WATER BASINS	RETENTION TANKS	SUMPS, PUMPS & PIPING	SITE PREPARATION
PT EVERGLADES	X	X	X	x	x
LAUDERDALE			x	x	x
RMERA	x	×	X	X	x
FT MYERS	X	x	x	X	x
CAPE CANAVERAL	x	x	x	X	×
SANFORD			x	×	x
CUTLER		×	×	×	x
TURKEY POINT			x	×	x
MARTIN			×	x	×
PUTNAM		x	×	×	X

#### **GENERAL DESCRIPTIONS**

- Engineering services for site-specific engineering and design will be contracted.
- All unlined ash basins will be lined to prevent percolation of wastewater into the ground and groundwater. Polymer liners are generally used.
- Where not currently available, chemical storage tanks will be installed to store caustic (e.g., sodium hydroxide) to treat ash sluice water to reduce the concentration of metals.
- Treated water retention tanks will be installed to store accumulations of treated ash sluice water that will no longer be eliminated through discharges. The water will be reused as ash sluice water.
- Additional sumps, pumps and piping will be installed, as needed, to transport the water from basins to tanks to the plant's service water system.
- All unlined stormwater basins (a.k.a., evaporation/percolation basins) will be lined to prevent percolation into the ground and groundwater. Polymer liners are generally used.
- Organo-clay treatment vessels will be installed where needed to remove entrained oil from stormwater. Oil removal is necessary to prevent fouling of the water treatment plant and ash handling systems.
- Treated water retention tanks will be installed to store accumulations of treated stormwater that will no longer be eliminated through discharges. The water will be reused as service water (e.g., ash sluice water) or as make-up water to the water treatment plant.
- Additional sumps, pumps and piping will be installed, as needed, to transport the water from basins to tanks to the service water system and the water treatment plant.
- Site preparation such as excavation necessary to pour foundations, install sumps, prepare basins for liners, etc., will be included in the project.
- Sumps, pumps and piping necessary to capture and transport boiler blowdown wastewater will be installed as needed.
- Sumps, pumps and piping necessary to capture and transport water plant effluent will be installed as needed.

Note: Salary dollars for FPL manpower are not included in this petition.