

1989

ANNUAL
RADIOLOGICAL ENVIRONMENTAL
OPERATING REPORT

TURKEY POINT PLANT

UNIT NOS. 3 AND 4

License Nos. DPR-31, DPR-41

Docket Nos. 50-250, 50-251

Data Submitted By: Florida DHRS

Report Prepared:

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Report Reviewed:

J. L. Daniels 3/27/90

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I. INTRODUCTION

This report is submitted pursuant to Specification 6.9 of Turkey Point Units 3 & 4 Technical Specifications. The Annual Radiological Environmental Operating Report provides information, summaries and analytical results pertaining to the Radiological Environmental Monitoring Program for the calendar year indicated. This report covers surveillance activities meeting the requirements of Unit No. 3 and Unit No. 4. Technical Specifications.

II. RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

A. Purpose: The purpose of the radiological environmental monitoring program is to provide representative measurements of radiation and of radioactive materials in those exposure pathways and for those radionuclides which lead to the highest potential radiation exposures to members of the public resulting from station operation. The radiological environmental monitoring program also supplements the radiological effluent monitoring program by verifying that the measurable concentrations of radioactive materials and levels of radiation are not higher than expected on the basis of the effluent measurements and the modeling of the environmental exposure pathways.

B. Program Description: The Radiological Environmental Monitoring Program for the Turkey Point Plant is conducted pursuant to Technical Specifications 4.12 of Turkey Point Units 3 & 4 Technical Specifications.

1. Sample Locations, Types and Frequencies:

- a. Direct radiation gamma exposure rate is monitored continuously at 21 locations by thermoluminescent dosimeters (TLDs). TLDs are collected and analyzed quarterly.
- b. Airborne radioiodine and particulate samplers are operated continuously at five locations. Samples are collected and analyzed weekly. Analyses include Iodine-131, gross beta, and gamma isotopic measurements.
- c. Surface water samples are collected from three locations. Samples are collected and analyzed monthly. Analyses include gamma isotopic and tritium measurements.

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- d. Shoreline sediment samples are collected from three locations coinciding with the locations for surface water samples. Samples are collected and analyzed semi-annually. Sediment samples are analyzed by gamma isotopic measurements.
- e. Fish and invertebrate samples are each collected from the two locations coinciding with two of the locations for surface water samples. Samples are collected and analyzed semi-annually. Fish and invertebrate samples are analyzed by gamma isotopic measurements.
- f. Broad leaf vegetation samples are collected from three locations. Samples are collected and analyzed monthly. Broad leaf vegetation samples are analyzed by gamma isotopic measurements.

Attachment A provides specific information pertaining to sample locations, types and frequencies.

2. Analytical Responsibility:

Radiological environmental monitoring for the Turkey Point Plant is conducted by the State of Florida, Department of Health and Rehabilitative Services (HRS). Samples are collected and analyzed by HRS personnel. Samples are analyzed at the HRS Environmental Radiation Control Laboratory in Orlando, Florida.

- C. Analytical Results: Table 1, Environmental Radiological Monitoring Program Annual Summary provides a summary for all specified samples collected during the referenced surveillance period. Deviations from the sample schedule, missing data and/or samples not meeting the specified "A PRIORI" LLD, if any, are noted and explained in Tables 1A and 1B respectively. Analysis data for all specified samples analyzed during the surveillance period is provided in Attachment B.
- D. Land Use Census: A land use census out to a distance of 5 miles radius from the Turkey Point Plant is conducted annually to determine the location of the nearest milk animal, residence, and garden producing broad leaf vegetation in each of the sixteen meteorological sectors. A summary of the land use census for the surveillance year is provided in Table 2, Land Use Census Summary.

No locations yielding a calculated dose or dose commitment greater than the values currently being calculated were identified by the land use census.

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No locations yielding a calculated dose or dose commitment (via the same exposure pathway) 20 % greater than locations currently being sampled in the radiological environmental monitoring program were identified by the land use census.

- E. Interlaboratory Comparison Program: The State of Florida HRS Environmental Radiation Control Laboratory participates in the Environmental Radioactivity Laboratory Intercomparison Studies Program conducted by the Environmental Protection Agency. Results from the Interlaboratory Comparison Program are provided in Attachment C.

III. DISCUSSION AND INTERPRETATION OF RESULTS

- A. Reporting of Results: The Annual Radiological Environmental Operating Report contains the summaries, interpretations and information required by the Turkey Point Units 3 & 4 Technical Specifications. Table 1 provides a summary of the measurements made for the nuclides required by Technical Specifications, Table 4.12-2, for all samples specified by Table 4.12-1. In addition, summaries are provided for other nuclides identified in the specified samples, including those not related to station operation. These include nuclides such as K-40, Th-232, Ra-226 and Be-7 which are common in the Florida environment.
- B. Interpretation of Results
1. Direct Radiation: The results for direct radiation monitoring are consistent with past measurements for the specified locations. The exposure rate data shows no indication of any trends attributed to effluents from the plant. The measured exposure rates are consistent with exposure rates that were observed during the preoperational surveillance program. Direct radiation monitoring results are summarized in Table 1.
 2. Air Particulates/Radioiodine: Results of gross beta measurement are consistent with past measurements. No radioiodine was detected. The only identified isotope is cosmic-ray produced Be-7 and naturally occurring K-40 at levels consistent with past measurements.

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3. Surface Water: The results for radioactivity measurements in surface water samples are consistent with past measurements. Tritium was reported as present in the surface water samples collected from Site T-81. Additionally, the control location identified Tritium in 1 of 12 samples at a level approximately LLD. These results are consistent with the known subsurface interchange that occurs between the closed cooling canal and its surrounding waters, and the pressure gradients caused by the flow of aquifer subsurface waters in South Florida. The highest reported tritium is about 3% of the concentration of tritium that is permitted in community drinking water systems and about 2% of the reporting value specified by Technical Specifications Table 4.12-2.
4. Waterborne Sediment and Food Products: The results for radioactivity measurements in waterborne sediment and fish samples are consistent with past measurements and (except for Cs-137) with measurements made during the preoperational surveillance program. The sediment samples collected at the control locations had a positive Cs-137 value reported. The maximum value is 35% of the Table 4.12-3 LLD and is about 3% of the table 4.12-2 reporting levels. There were no positive results of reactor produced isotopes occurring in fish or invertebrates. Results for the waterborne sediment, fish and crustacea samples are summarized in Table 1.
5. Broad Leaf Vegetation: The results for radioactivity measurements are consistent with past measurements.

C. Conclusions

The data obtained through the Turkey Point Plant Radiological Environmental Monitoring Program verifies that the levels of radiation and concentrations of radioactive materials in environmental samples, representing the highest potential exposure pathways to members of the public, are not being increased. The measurements verify that the dose or dose commitment to members of the public, due to operation of Turkey Point Units Nos. 3 & 4, during the surveillance year, are well within "as low as reasonably achievable (ALARA)" criteria established by 10 CFR 50, Appendix I.

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM ANNUAL SUMMARY

Name of Facility Turkey Point Unit Nos. 3 and 4 Docket No.(s) 50-250 and 50-251
 Location of Facility Dade, Florida Reporting Period January 1 - December 31, 1989
 (County, State)

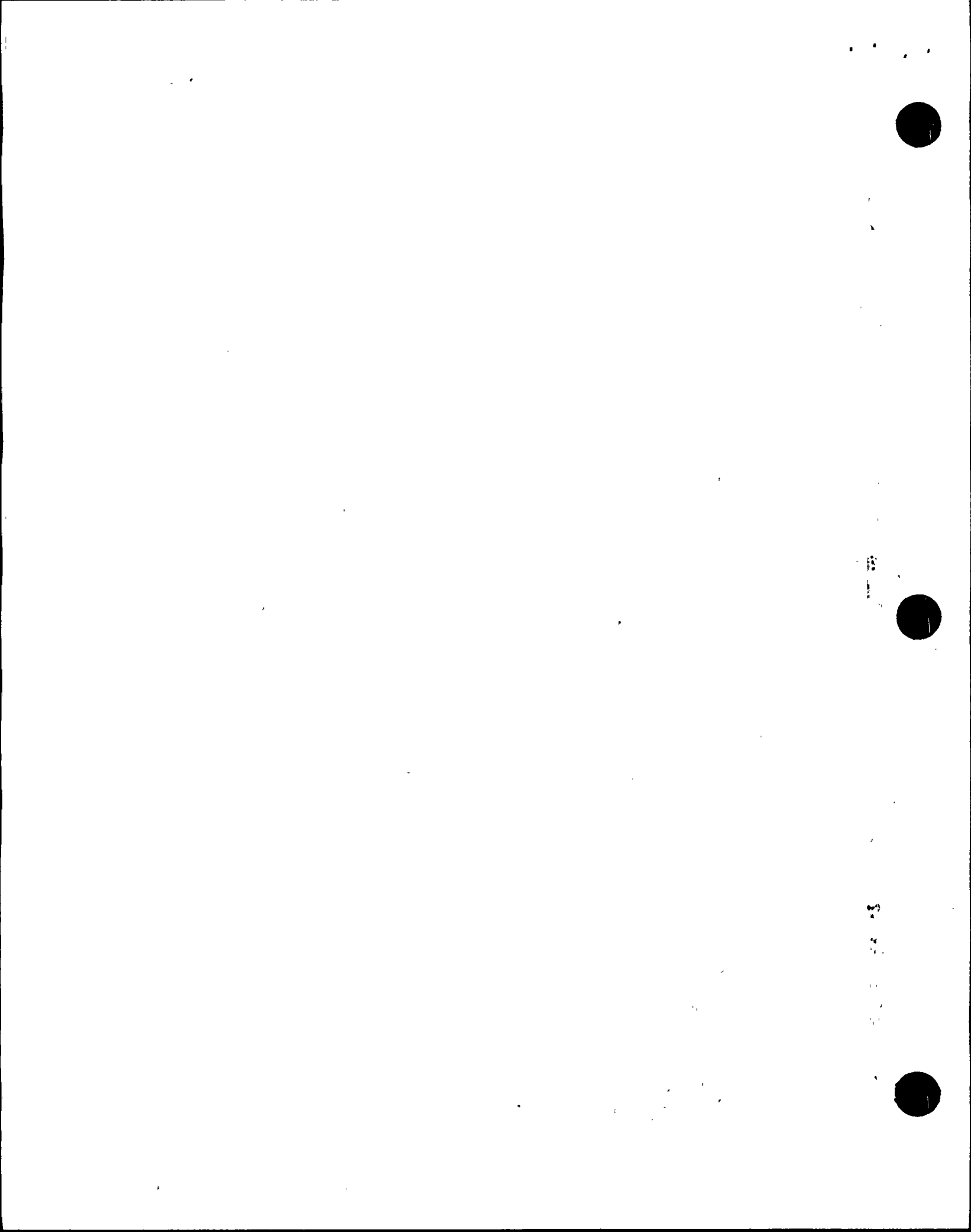
PATHWAY: DIRECT RADIATION

SAMPLES COLLECTED: TLD

UNITS: MICRO - R/hr

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
Exposure Rate, 84 ^d	---	5.6 (84/84) 4.7 - 7.7	NW-10 10 miles, NW	7.6 (4/4) 7.5 - 7.7	---

Number of Nonroutine Reported Measurements = 0



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Name of Facility Turkey Point Unit Nos. 3 and 4 Docket No. (s) 50-250 and 50-251
 Location of Facility Dade, Florida Reporting Period January 1 - December 31, 1989
 (County, State)

PATHWAY: AIRBORNE

SAMPLES COLLECTED: RADIOIODINE AND PARTICULATES

UNITS: PICO - Ci/M³

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
¹³¹ I, 260	0.024	< MDA	---	---	< MDA
Gross Beta, 260	0.0025	0.010 (260/260) 0.003 - 0.020	T-51 2 miles, NNW	0.010 (52/52) 0.003 - 0.018	0.010 (52/52) 0.003 - 0.019
Composite Gamma Isotopic, 20					
⁷ Be	0.0052	0.104 (20/20) 0.073 - 0.134	T-51 < 2 miles, NNW	0.112 (4/4) 0.086 - 0.134	0.102 (4/4) 0.078 - 0.116
⁴⁰ K	0.012	0.011 (1/20)	T-72 < 1 mile, WSW	0.011 (1/4)	< MDA
¹³⁴ Cs	0.00069	< MDA	---	---	< MDA
¹³⁷ Cs	0.00066	< MDA	---	---	< MDA

Number of Nonroutine Reported Measurements = 0

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Name of Facility Turkey Point Unit Nos. 3 and 4 Docket No.(s) 50-250 and 50-251
 Location of Facility Dade, Florida Reporting Period January 1 - December 31, 1989
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PATHWAY: WATERBORNE
 SAMPLES COLLECTED: SURFACE WATER
 UNITS: PICO - Ci/LITER

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
Tritium, 36	230	320 (13/36) 90-850	T-81 6 miles, S	340 (12/12) 90 - 850	90 (1/12)
Gamma Isotopic, 36					
⁴⁰ K	60	330 (36/36) 210 - 420	T-81 6 miles, S	356 (12/12) 230 - 400	298 (12/12) 210 - 360
⁵⁴ Mn	4	< MDA	---	---	< MDA
⁵⁹ Fe	8	< MDA	---	---	< MDA
⁵⁸ Co	4	< MDA	---	---	< MDA
⁶⁰ Co	4	< MDA	---	---	< MDA
⁶⁵ Zn	8	< MDA	---	---	< MDA
⁹⁵ Zr-Nb	7	< MDA	---	---	< MDA
¹³¹ I	5	< MDA	---	---	< MDA
¹³⁴ Cs	5	< MDA	---	---	< MDA
¹³⁷ Cs	4	< MDA	---	---	< MDA
¹⁴⁰ Ba-La	11	< MDA	---	---	< MDA

Number of Nonroutine Reported Measurements = 0

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 (County, State)

PATHWAY: WATERBORNE

SAMPLES COLLECTED: SHORELINE SEDIMENT

UNITS: PICO - Ci/Kg, DRY

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
Gamma Isotopic, 6					
⁷ Be	100	392 (4/6) 140 - 840	T-67 13-18 mi, N/NNE	840 (1/2)	840 (1/2)
⁴⁰ K	140	1082 (6/6) 360 - 2610	T-67 13-18 mi, N/NNE	2120 (2/2) 1630 - 2610	2120 (2/2) 1630 - 2610
¹³⁷ Cs	12	55 (1/6)	T-67 13-18 mi, N/NNE	55 (1/2)	55 (1/2)
²³² Th	52	56 (1/6)	T-81 6 miles, S	56 (1/2)	< MDA
²²⁶ Ra	49	536 (5/6) 204-812	T-42 < 1 mi, ENE	713 (2/2) 645-781	204 (1/2)
⁵⁸ Co	9	< MDA	---	---	< MDA
⁶⁰ Co	12	< MDA	---	---	< MDA
¹³⁴ Cs	14	< MDA	---	---	< MDA

Number of Nonroutine Reported Measurements = 0



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PATHWAY: INGESTION
 SAMPLES COLLECTED: CRUSTACEA
 UNITS: PICO - Ci/Kg, WET

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
Gamma Isotopic, 4					
⁴⁰ K	130	2085 (4/4) 1660 - 2370	T-81 6 miles, S	2230 (2/2) 2090 - 2370	1940 (2/2) 1660 - 2220
²²⁶ Ra	20	186 (4/4) 94 - 315	T-81 6 miles, S	275 (2/2) 235 - 315	96 (2/2) 94 - 99
⁵⁴ Mn	9	< MDA	---	---	< MDA
⁵⁹ Fe	16	< MDA	---	---	< MDA
⁵⁸ Co	9	< MDA	---	---	< MDA
⁶⁰ Co	19	< MDA	---	---	< MDA
⁶⁵ Zn	17	< MDA	---	---	< MDA
¹³⁴ Cs	9	< MDA	---	---	< MDA
¹³⁷ Cs	9	< MDA	---	---	< MDA

Number of Nonroutine Reported Measurements = 0



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PATHWAY: INGESTION
 SAMPLES COLLECTED: FISH
 UNITS: PICO - Ci/Kg, WET

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
Gamma Isotopic, 4					
⁴⁰ K	130	2338 (4/4) 1850 - 2580	T-81 6 miles, S	2460 (2/2) 2340 - 2580	2215 (2/2) 1850 - 2580
²²⁶ Ra	18	129 (1/4)	T-81 6 miles, S	129 (1/2)	< MDA
⁵⁴ Mn	9	< MDA	---	---	< MDA
⁵⁹ Fe	16	< MDA	---	---	< MDA
⁵⁸ Co	9	< MDA	---	---	< MDA
⁶⁰ Co	10	< MDA	---	---	< MDA
⁶⁵ Zn	17	< MDA	---	---	< MDA
¹³⁴ Cs	9	< MDA	---	---	< MDA
¹³⁷ Cs	9	< MDA	---	---	< MDA

Number of Nonroutine Reported Measurements = 0

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM ANNUAL SUMMARY

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 Location of Facility Dade, Florida Reporting Period January 1 - December 31, 1989
 (County, State)

PATHWAY: INGESTION
 SAMPLES COLLECTED: BROAD LEAF VEGETATION
 UNITS: PICO - Ci/Kg, WET

Type and Total Number of Analyses Performed	Lower Limit of Detection ^a (LLD)	All Indicator Locations Mean (f) Range	Location with Highest Annual Mean		Control Locations Mean (f) ^b Range
			Name ^c Distance & Direction	Mean (f) ^b Range	
Gamma Isotopic, 36					
⁷ Be	71	934 (36/36) 260 - 2180	T-40 3 miles, W	1070 (12/12) 260 - 2180	820 (12/12) 370 - 1480
⁴⁰ K	100	3700 (36/36) 2240 - 5140	T-40 3 miles, W	4250 (12/12) 3440 - 5140	3320 (12/12) 2240 - 4660
¹³⁷ Cs	8	110 (32/36) 16 - 320	T-41 2 miles, WNW	188 (12/12) 93 - 320	91 (8/12) 47 - 207
¹³¹ I	9	< MDA	---	---	< MDA
¹³⁴ Cs	8	< MDA	---	---	< MDA

Number of Nonroutine Reported Measurements = 0

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Name of Facility Turkey Point Unit Nos. 3 and 4

Docket No.(s) 50-250 and 50-251

Location of Facility Dade, Florida
(County, State)

Reporting Period January 1 - December 31, 1989

NOTES

- a. The LLD is an "a priori" lower limit of detection which establishes the smallest concentration of radioactive material in a sample that will yield a net count above system background that will be detected with 95% probability with only 5% probability of falsely concluding that a blank observation represents a real signal.

LLD's in this column are at time of measurement. The MDAs reported in Attachment B for the individual samples have been corrected to the time of sample collection.
- b. Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parentheses (f).
- c. Specific identifying information for each sample location is provided in Attachment - A.
- d. Results are based upon the average net response of two TLDs. (Thermoluminescent dosimeters).

MDA refers to minimum detectable activity.



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TABLE 1A

DEVIATIONS/MISSING DATA

<u>Date</u>	<u>Location</u>	<u>Description of Problems</u>	<u>Deviation(s)</u>	<u>Corrective Action</u>
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There were no deviations and/or occurrences of missing data for the reporting period of January 1 - December 31, 1989



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TABLE 1B

ANALYSES WITH LLDs ABOVE TABLE 4.12-3 DETECTION CAPABILITIES
1/1/89 - 12/31/89

The values specified in Table 4.12-3, Detection Capabilities,
were achieved for all samples.

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TABLE 2

LAND USE CENSUS

DISTANCE TO NEAREST (a, b)

Sector	5/89 Milk (c) Animal	5/89 Residence	5/89 Garden (d)
N	L (e)	2.1/350 (g)	L
NNE	0 (f)	0	0
NE	0	0	0
ENE	0	0	0
E	0	0	0
ESE	0	0	0
SE	0	0	0
SSE	0	0	0
S	L	L (g)	0
SSW	L	L	L
SW	L	L	L
WSW	L	L	L
W	L	L	L
WNW	L	L	4.0/229
NW	L	3.7/319	4.3/308
NNW	L	L (g)	4.5/328

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TABLE 2 NOTES

LAND USE CENSUS

- (a) All categories surveyed out to 5 miles radius from the Turkey Point Plant
- (b) The following format is used to denote the location:
distance (miles)/bearing (degrees)
- For example, a residence located in the north sector at a distance of 2.1 miles bearing 350 degrees is recorded as 2.1/350.
- (c) Potential milk animal locations.
- (d) Gardens with an estimated growing area of 500 square feet or more.
- (e) L denotes that the sector area is predominantly a land area unoccupied by the category type.
- (f) O denotes that the sector area is predominantly an ocean area.
- (g) Non-residential occupied buildings in this sector include the following:

<u>Sector</u>	<u>Distance</u>	<u>Description</u>
N	1.8/349	24-hour Security Staffing Building
S	4.9/171	Small building/boat dock-not considered a resident
NNW	4.5/327	2 mobile homes used for field offices
NNW	1.8/345	Security booth at park entrance

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ATTACHMENT A
KEY TO SAMPLE LOCATIONS

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Key to Sample Locations

PATHWAY: DIRECT RADIATION
 SAMPLES COLLECTED: TLD
 SAMPLE COLLECTION FREQUENCY: QUARTERLY

<u>Location Name</u>	<u>Direction Sector</u>	<u>Approximate Distance (miles)</u>	<u>Description</u>
N-1	N	1	Convoy Point
N-5	N	6	North of Moody Drive
N-10	N	12	Old Cutler Rd. at S.W. 87 Avenue
NNW-1	NNW	<1	Turkey Point Entrance Rd. ^{m?}
NNW-10	NNW	9	Burr Rd. at Hainlin Mill Dr.
NW/WNW-1	WNW	1	Turkey Point Entrance Rd.
NW-5	NNW	4	Dolan's Farm on Kings Hwy.
NW-10	NW	10	Intersec Farm Lite & Coconut Palm
W/WNW-5	W	5	Palm Dr. at Tallahassee Rd.
WNW-10	WNW	9	Homestead near Vehicle Inspect. Station
W-1	W	1	On Site near Cooling Tower
W-10	W	10	Florida City near Fire Tower
SW-10	WSW	12	Old Hawk Missile Site, South of Florida City
SW/SSW-1	SSW	1	On-Site near Land Utilization Offices
SW-10	SW	10	U.S. 1 South of Florida City
SSW/SW-5	SSW	5	On-Site, Southeast Corner of Cooling Canals
SSW-10	SSW	10	At Card Sound Bridge
S-5	S	5	On-Site, South End of Cooling Canals
S-10	S	10	Card Sound Road at Steamboat Creek
SSE/S-1	SSE	1	Turtle Point
SSE-10	SSE	8	Ocean Reef

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Key to Sample Locations

PATHWAY: AIRBORNE
SAMPLES COLLECTED: RADIOIODINE AND PARTICULATES
SAMPLE COLLECTION FREQUENCY: WEEKLY

<u>Location Name</u>	<u>Direction Sector</u>	<u>Approximate Distance (miles)</u>	<u>Description</u>
T-51	NNW	2	Homestead Bayfront Park
T-57	NW	4	Tree Nursery on 316th Street
T-58	NW	1	Turkey Point Entrance Road
T-72	WSW	<1	Turkey Point Boy Scout Camp
Control:			
T-64	NNE	22	Natoma Substation

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Key to Sample Locations

PATHWAY: WATERBORNE
SAMPLES COLLECTED: SURFACE WATER (OCEAN)
SAMPLE COLLECTION FREQUENCY: MONTHLY

<u>Location Name</u>	<u>Direction Sector</u>	<u>Approximate Distance (miles)</u>	<u>Description</u>
T-42	ENE	<1	Biscayne Bay at Turkey Point
T-81	S	6	Card Sound, near Mouth of Old Discharge Canal
Control:			
T-67	N, NNE	13-18	Near Biscayne Bay, Vicinity of Cutler Plant, North to Matheson Hammock Park

SAMPLES COLLECTED: SHORELINE SEDIMENT
SAMPLE COLLECTION FREQUENCY: SEMI-ANNUALLY

<u>Location Name</u>	<u>Direction Sector</u>	<u>Approximate Distance (miles)</u>	<u>Description</u>
T-42	ENE	<1	Biscayne Bay at Turkey Point
T-81	S	6	Card Sound, near Mouth of Old Discharge Canal
Control:			
T-67	N, NNE	13-18	Near Biscayne Bay, Vicinity of Cutler Plant, North to Matheson Hammock Park

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Key to Sample Locations

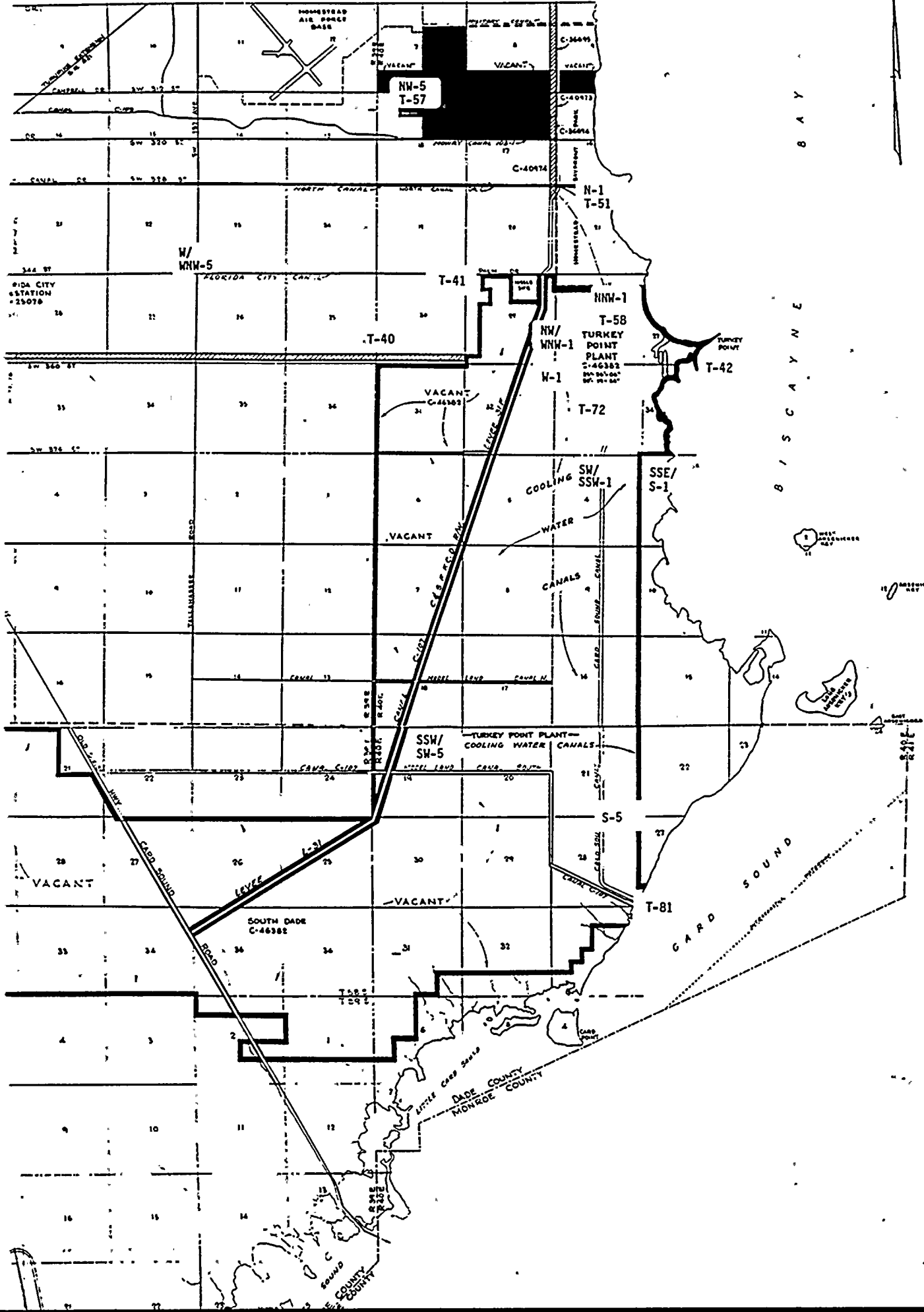
PATHWAY: INGESTION
SAMPLES COLLECTED: CRUSTACEA AND FISH
SAMPLE COLLECTION FREQUENCY: SEMI-ANNUALLY

<u>Location Name</u>	<u>Direction Sector</u>	<u>Approximate Distance (miles)</u>	<u>Description</u>
T-81	S	6	Card Sound, Vicinity of Turkey Point Facility
Control: T-67	N, NNE	13-18	Near Biscayne Bay, Vicinity of Cutler Park, North to Matheson Hammock Park

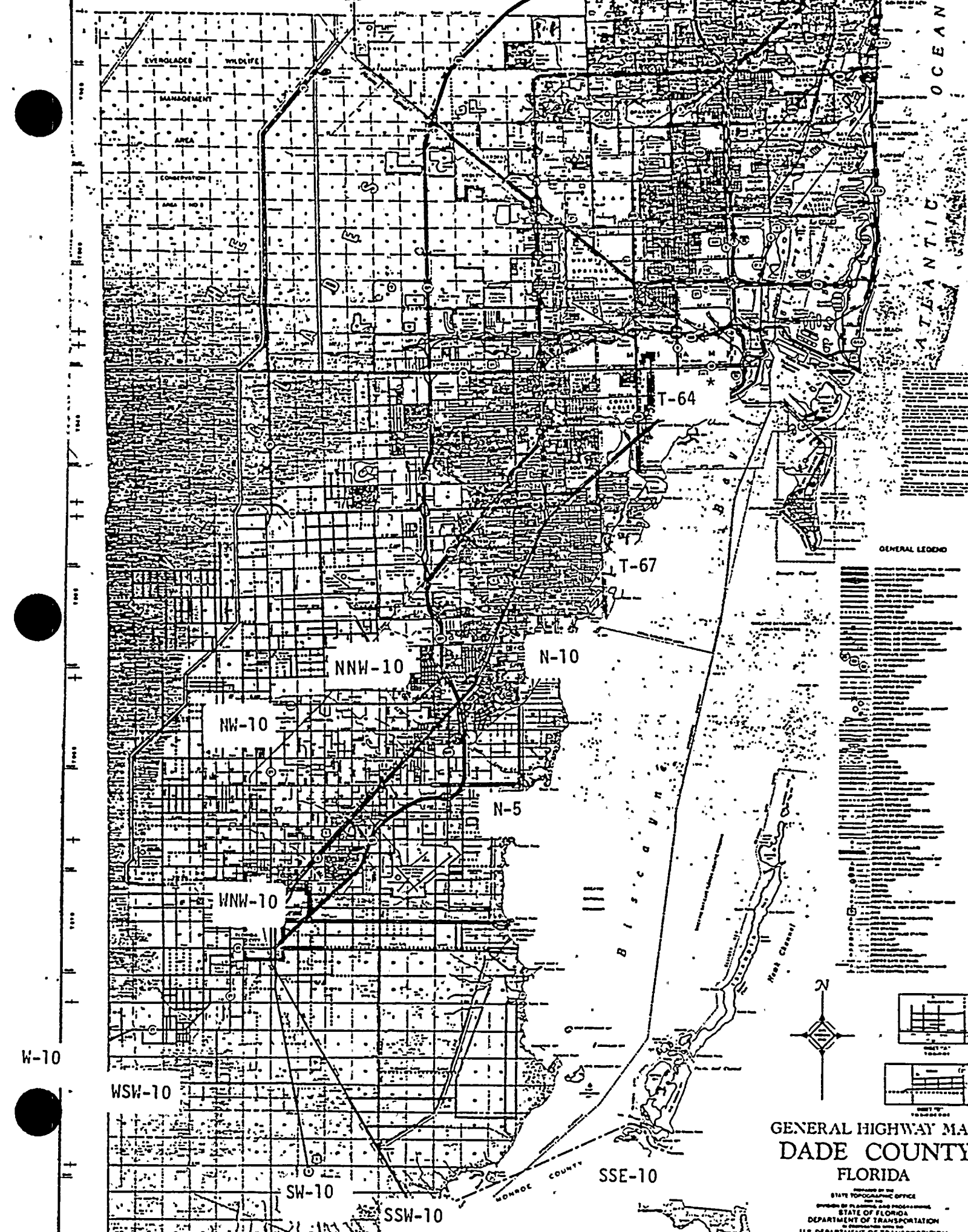
SAMPLES COLLECTED: BROAD LEAF VEGETATION
SAMPLE COLLECTION FREQUENCY: MONTHLY

<u>Location Name</u>	<u>Direction Sector</u>	<u>Approximate Distance (miles)</u>	<u>Description</u>
T-40	W	3	South of Palm Dr. on S.W. 117th Street Extension
T-41	WNW	2	Palm Dr., West of Old Missile Site near Plant Site Boundary
Control: T-67	N, NNE	13-18	Near Biscayne Bay, Vicinity of Cutler Park, North to Matheson Hammock Park

CONTINUED ON SHEET 2







EVERGLADES WILDLIFE
MANAGEMENT
AREA
CONSERVATION

ATLANTIC OCEAN

T-64

T-67

NNW-10

N-10

NW-10

N-5

WNW-10

B I S C A Y N E

WASH CANAL

MONROE COUNTY

SSE-10

SW-10

SSW-10

WSW-10

W-10

GENERAL LEGEND

[Symbol]	Interstate Highway
[Symbol]	State Highway
[Symbol]	County Road
[Symbol]	Other Road
[Symbol]	Waterway
[Symbol]	Canal
[Symbol]	Water
[Symbol]	Marsh
[Symbol]	Swamp
[Symbol]	Forest
[Symbol]	Open Land
[Symbol]	Urban Area
[Symbol]	Suburban Area
[Symbol]	Railroad
[Symbol]	Power Line
[Symbol]	Telephone Line
[Symbol]	Other Utility
[Symbol]	Spot Elevation
[Symbol]	Contour
[Symbol]	Spot Depression
[Symbol]	Contour Depression
[Symbol]	Spot Height
[Symbol]	Contour Height
[Symbol]	Spot Elevation (Inverted)
[Symbol]	Contour (Inverted)
[Symbol]	Spot Depression (Inverted)
[Symbol]	Contour Depression (Inverted)
[Symbol]	Spot Height (Inverted)
[Symbol]	Contour Height (Inverted)
[Symbol]	Spot Elevation (Inverted)
[Symbol]	Contour (Inverted)
[Symbol]	Spot Depression (Inverted)
[Symbol]	Contour Depression (Inverted)
[Symbol]	Spot Height (Inverted)
[Symbol]	Contour Height (Inverted)



GENERAL HIGHWAY MA
DADE COUNTY
FLORIDA

ISSUED BY THE
STATE TOPOGRAPHIC OFFICE
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

1989
ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT
TURKEY POINT - UNITS NOS. 3 AND 4

ATTACHMENT B

RADIOLOGICAL SURVEILLANCE OF
FLORIDA POWER AND LIGHT COMPANY'S

TURKEY POINT SITE

1989

First Quarter, 1989
Second Quarter, 1989
Third Quarter, 1989
Fourth Quarter, 1989