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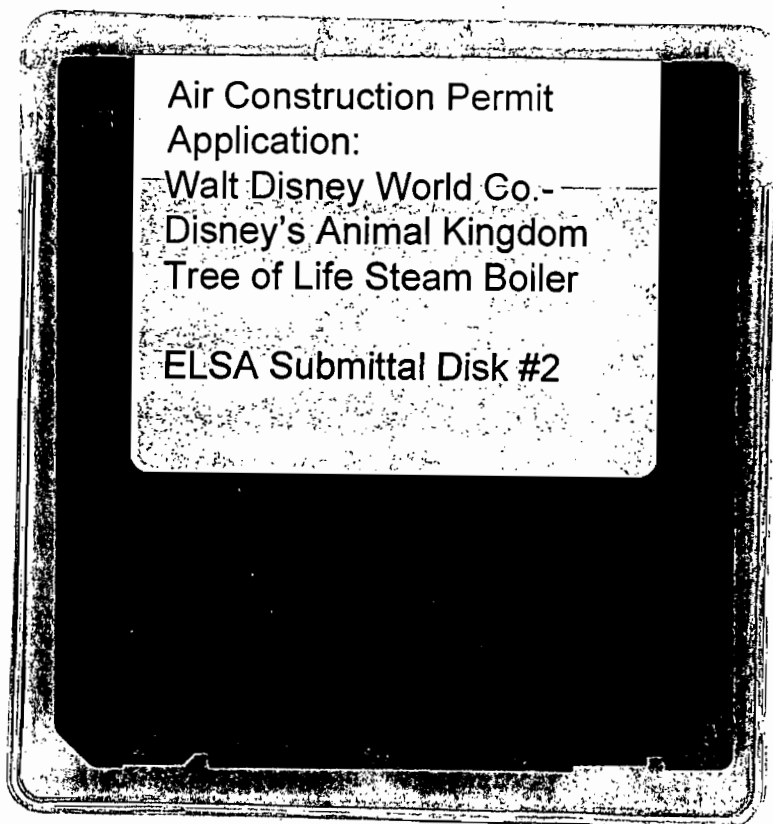
BUREAU OF  
AIR REGULATION

# APPLICATION FOR AN AIR CONSTRUCTION PERMIT

## WALT DISNEY WORLD CO.

## DISNEY'S ANIMAL KINGDOM

## TREE OF LIFE BOILER



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**Department of  
Environmental Protection**

**DIVISION OF AIR RESOURCES MANAGEMENT  
APPLICATION FOR AIR PERMIT - LONG FORM**

**I. APPLICATION INFORMATION**

**Identification of Facility Addressed in This Application**

1. Facility Owner/Company Name : Walt Disney World Co.	
2. Site Name : Walt Disney World Resort	
3. Facility Identification Number : 0950111	<input type="checkbox"/> Unknown
4. Facility Location : This site is located in the Walt Disney World Resort at Disney's Animal Kingdom (DAK) Theme Park.  Street Address or Other Locator : P.O. Box 10,000 City : Lake Buena Vista County : Orange Zip Code : 32830-1000	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

I. Part 1 - 1

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Lee Schmudde  
Title : Vice President, Legal

2. Owner or Authorized Representative or Responsible Official Mailing Address :

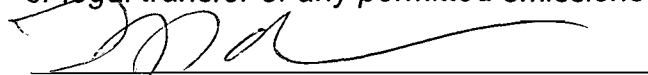
Organization/Firm : Walt Disney World Co.  
Street Address : P.O. Box 10,000  
City : Lake Buena Vista  
State : FL Zip Code : 32830-1000

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (407)828-3701 Fax : (407)828-3239

4. Owner/Authorized Representative or Responsible Official Statement :

*I, the undersigned, am the owner or authorized representative\* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

  
Signature

2 - 27 - 96  
Date

\* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
No Id	Tree of Life Steam Boiler (DAK-10)	AC1F

I. Part 3 - 1

DEP Form No. 62-210.900(1) - Form  
Effective : 3-21-96

**Purpose of Application and Category**

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

- Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
  
- Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

- Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

- Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

- Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

I. Part 4 - 2

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

Current operation permit number(s), if any :

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

- Air construction permit for one or more existing, but unpermitted, emissions units.

I. Part 4 - 3

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96



**Application Processing Fee**

Check one :

[X] Attached - Amount : \$250.00 [ ] Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations :	
<p>Disney's Animal Kingdom is a new theme park within the Walt Disney World Resort complex. The new theme park will include live animal exhibits, rides, shows, restaurants, merchandise locations, and staff support facilities. The air emission source to be operated is a natural gas fire steam boiler, a Parker model 103-25, to be used for steam effects in the Tree of Life show attraction</p> <p>This emissions source is designated DAK-10. The emissions source is fired only with natural gas and has a total maximum heat input rating of 1.075 MMBtu/hr.</p> <p>The proposed unit will cause an overall increase in annual potential emissions from the Walt Disney World Resort complex as follows: CO: 0.099 tpy , NOx: 0.471 tpy, PM/PM10: 0.056 tpy, SO2: 0.003 tpy, VOC/TOC: 0.027 tpy</p>	
2. Projected or Actual Date of Commencement of Construction :	01-Aug-1997
3. Projected Date of Completion of Construction :	

**Professional Engineer Certification**

1. Professional Engineer Name : Bob Beaver Registration Number : 32528	
2. Professional Engineer Mailing Address :	
Organization/Firm : Walt Disney World Co. Street Address : P.O. Box 10,000 City : Lake Buena Vista State : FL Zip Code : 32830-1000	
3. Professional Engineer Telephone Numbers :	
Telephone : (407)828-1584	Fax : (407)934-7297

4. Professional Engineer Statement :

*I, the undersigned, hereby certified, except as particularly noted herein\*, that :*

*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

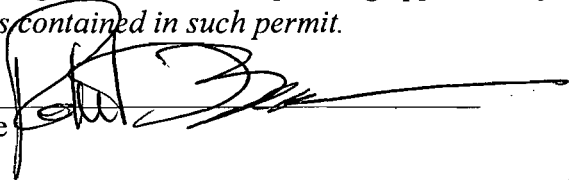
*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [  ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

Signature



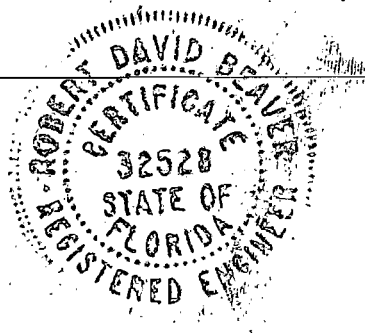
Date

4/27/98

\* Attach any exception to certification statement.

I. Part 6 - 1

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Effective : 3-21-96



**Application Contact**

1. Name and Title of Application Contact :

Name : Richard Bumar, E.I.  
Title : Environmental Ctrl Represenatative

2. Application Contact Mailing Address :

Organization/Firm : Walt Disney World Co.  
Street Address : P.O. Box 10,000  
City : Lake Buena Vista  
State : FL Zip Code : 32830-1000

3. Application Contact Telephone Numbers :

Telephone : (407)827-2748 Fax : (407)827-2774

**Application Comment**

It is requested that this permitting action be kept separate from the Walt Disney World Title V permit at this time. The emissions unit will be incorporated, in a separate permitting action at a future date, after the construction permit has been issued and visible emissions testing has been completed.

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility, Location, and Type

1. Facility UTM Coordinates : Zone :                      East (km) :                      North (km) :			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) :    28   21   28    Longitude (DD/MM/SS) :    81   35   27			
3. Governmental Facility Code : 0	4. Facility Status Code : C	5. Facility Major Group SIC Code : 79	6. Facility SIC(s) :
7. Facility Comment :  Facility SIC is 79-96			

#### Facility Contact

1. Name and Title of Facility Contact :  Armando Rodriguez Director of Environmental Affairs	
2. Facility Contact Mailing Address : Organization/Firm :    Walt Disney World Co. Street Address :    P.O. Box 10,000 City :    Lake Buena Vista                      State : FL    Zip Code :    32830-1000	
3. Facility Contact Telephone Numbers : Telephone :    (407)827-2730                      Fax :    (407)827-2774	

**Facility Regulatory Classifications**

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	N
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

II. Part 2 - 1

**B. FACILITY REGULATIONS**

Rule Applicability Analysis

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**B. FACILITY REGULATIONS**

**List of Applicable Regulations**

Title V core list

II. Part 3b - 1

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Effective : 3-21-96

**C. FACILITY POLLUTANTS**

**Facility Pollutant Information**

<b>1. Pollutant Emitted</b>	<b>2. Pollutant Classification</b>



**D. FACILITY POLLUTANT DETAIL INFORMATION**

Pollutant \_\_\_\_\_


II. Part 4b - 1

Effective : 3-21-96

## D. FACILITY SUPPLEMENTAL INFORMATION

### Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	Attachment A
2. Facility Plot Plan :	Attachment B
3. Process Flow Diagram(s) :	Attachment C
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Application :	NA

### Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	NA
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	NA
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	

### III. EMISSIONS UNIT INFORMATION

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

Tree of Life Steam Boiler (DAK-10)

#### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[ X ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[ X ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :  Tree of Life Steam Boiler (DAK-10)		
2. Emissions Unit Identification Number : [ X ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 79
6. Emissions Unit Comment :  This emissions unit is a natural gas fired steam boiler to be used to produce special effects for the Tree of Life attraction stage show.		

**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Emissions Unit Control Equipment**      1

1. Description :

No control equipment will be installed.

2. Control Device or Method Code :

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Information Section**                      1  
Tree of Life Steam Boiler (DAK-10)

**Emissions Unit Details**

1. Initial Startup Date :	01-Mar-1998	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer : Parker	Model Number : 103-25	
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :	Degrees Fahrenheit	
Dwell Time :	Seconds	
Incinerator Afterburner Temperature :	Degrees Fahrenheit	

**Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate :	1	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :		
4. Maximum Production Rate :		
5. Operating Capacity Comment :		
Maximum Heat Input Rate = 1.075 mmBtu/hr		

**Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule :		
24 hours/day	7 days/week	
52 weeks/year	8,760 hours/year	

**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Rule Applicability Analysis**

Rule Applicability Analysis is not required for this permit application.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form  
Effective : 3-21-96

**Emissions Unit Information Section**  
Tree of Life Steam Boiler (DAK-10)

1

**List of Applicable Regulations**

62-296.406, F.A.C.: Fossil Fuel Steam Generation < 250 MMBtu/hr heat input

Title V core list

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form  
Effective : 3-21-96



### E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Tree of Life Steam Boiler (DAK-10)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	DAK-10	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :  Not applicable		
5. Discharge Type Code :	W	
6. Stack Height :	29	feet
7. Exit Diameter :	1.2	feet
8. Exit Temperature :	350	°F
9. Actual Volumetric Flow Rate :	425	acfm
10. Percent Water Vapor :	%	
11. Maximum Dry Standard Flow Rate :	dscfm	
12. Nonstack Emission Point Height :	feet	
13. Emission Point UTM Coordinates :		
Zone :	East (km) :	North (km) :
14. Emission Point Comment : Refer to Attachment D for unit specifications		

III. Part 7a - 1

**F. SEGMENT (PROCESS/FUEL) INFORMATION**

**Emissions Unit Information Section**      1

Tree of Life Steam Boiler (DAK-10)

**Segment Description and Rate :**      Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) :  Natural gas fired commercial boiler : 0.3-10 MMbtu/hr heat input	
2. Source Classification Code (SCC) :      1-03-006-03	
3. SCC Units :      Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate :      0.00	5. Maximum Annual Rate :      9.42
6. Estimated Annual Activity Factor :      0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :      1,000	
10. Segment Comment :  Maximum Hourly Rate= 0.0011 Million cubic feet burned	

III. Part 8 - 1

**G. EMISSIONS UNIT POLLUTANTS**  
**(Regulated and Unregulated Emissions Units)**

**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO			EL
2 - NOX			EL
3 - PM			EL
4 - SO2			EL
5 - VOC			EL

III. Part 9a - 1

DEP Form No. 62-210.900(1) - Form  
Effective : 3-21-96

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Pollutant Potential/Estimated Emissions :**      Pollutant      1

1. Pollutant Emitted : <b>CO</b>			
2. Total Percent Efficiency of Control :	0.00	%	
3. Potential Emissions :	0.02	lb/hour	0.10      tons/year
4. Synthetically Limited? [ ] Yes      [X] No			
5. Range of Estimated Fugitive/Other Emissions:  <div style="text-align: right;">to      tons/year</div>			
6. Emissions Factor : Reference :      AP-42, October 1996			
7. Emissions Method Code :      3			
8. Calculations of Emissions :  $1.075 \text{ MMBtu/hr} \div 1000 \text{ Btu/ft}^3 = 0.001075 \text{ MMft}^3/\text{hr}$ $0.001075 \text{ MMft}^3/\text{hr} \times 8760 \text{ hr/yr} = 9.417 \text{ MMft}^3/\text{yr}$ $21 \text{ lb CO/MMft}^3 \times 0.001075 \text{ MMft}^3/\text{hr} = 0.022575 \text{ lb/hr}$ $21 \text{ lb CO/MMft}^3 \times 9.417 \text{ MMft}^3/\text{yr} \div 2000 \text{ lb/ton} = 0.0988 \text{ ton/yr}$			
9. Pollutant Potential/Estimated Emissions Comment :			

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Emissions Unit Information Section**      1  
 Tree of Life Steam Boiler (DAK-10)

**Pollutant Potential/Estimated Emissions :**      Pollutant      2

1. Pollutant Emitted :    NOX			
2. Total Percent Efficiency of Control :	0.00	%	
3. Potential Emissions :	0.11	lb/hour	0.47      tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
5. Range of Estimated Fugitive/Other Emissions:		to	tons/year
6. Emissions Factor : Reference :      AP-42, October 1996			
7. Emissions Method Code :      3			
8. Calculations of Emissions :  $1.075 \text{ MMBtu/hr} \div 1000 \text{ Btu/ft}^3 = 0.001075 \text{ MMft}^3/\text{hr}$ $0.001075 \text{ MMft}^3/\text{hr} \times 8760 \text{ hr/yr} = 9.417 \text{ MMft}^3/\text{yr}$ $100 \text{ lb NOx/MMft}^3 \times 0.001075 \text{ MMft}^3/\text{hr} = 0.1075 \text{ lb/hr}$ $100 \text{ lb NOx/MMft}^3 \times 9.417 \text{ MMft}^3/\text{yr} \div 2000 \text{ lb/ton} = 0.471 \text{ ton/yr}$			
9. Pollutant Potential/Estimated Emissions Comment :			

III. Part 9b - 2

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Pollutant Potential/Estimated Emissions :**      Pollutant      3

1. Pollutant Emitted : <b>PM</b>				
2. Total Percent Efficiency of Control :		0.00	%	
3. Potential Emissions :				
0.01		lb/hour	0.06	tons/year
4. Synthetically Limited? [ ] Yes                    [X] No				
5. Range of Estimated Fugitive/Other Emissions:				
		to	tons/year	
6. Emissions Factor : Reference :      AP-42, October 1996				
7. Emissions Method Code :      3				
8. Calculations of Emissions :				
$1.075 \text{ MMBtu/hr} \div 1000 \text{ Btu/ft}^3 = 0.001075 \text{ MMft}^3/\text{hr}$ $0.001075 \text{ MMft}^3/\text{hr} \times 8760 \text{ hr/yr} = 9.417 \text{ MMft}^3/\text{yr}$ $11.9 \text{ lb PM/MMft}^3 \times 0.001075 \text{ MMft}^3/\text{hr} = 0.0128 \text{ lb/hr}$ $11.9 \text{ lb PM/MMft}^3 \times 9.417 \text{ MMft}^3/\text{yr} \div 2000 \text{ lb/ton} = 0.0560 \text{ ton/yr}$				
9. Pollutant Potential/Estimated Emissions Comment :				

III. Part 9b - 3

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Emissions Unit Information Section**       1    
Tree of Life Steam Boiler (DAK-10)

**Pollutant Potential/Estimated Emissions :**     Pollutant       4  

1. Pollutant Emitted : <b>SO2</b>			
2. Total Percent Efficiency of Control :	0.00		%
3. Potential Emissions :	0.00	lb/hour	0.00     tons/year
4. Synthetically Limited? [ ] Yes     [X] No			
5. Range of Estimated Fugitive/Other Emissions:     ,     to     tons/year			
6. Emissions Factor : Reference :     AP-42, October 1996			
7. Emissions Method Code :			
8. Calculations of Emissions :  1.075 MMBtu/hr ÷ 1000 Btu/ft <sup>3</sup> = 0.001075 MMft <sup>3</sup> /hr 0.001075 MMft <sup>3</sup> /hr x 8760 hr/yr = 9.417 MMft <sup>3</sup> /yr 0.6 lb SO2/MMft <sup>3</sup> x 0.001075 MMft <sup>3</sup> /hr = 0.00065 lb/hr 0.6 lb SO2/MMft <sup>3</sup> x 9.417 MMft <sup>3</sup> /yr ÷ 2000 lb/ton = 0.0028 ton/yr			
9. Pollutant Potential/Estimated Emissions Comment :			

III. Part 9b - 4





**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Pollutant Information Section**      5

**Allowable Emissions**      1

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	0.03      tons VOC/year
4. Equivalent Allowable Emissions :	0.01      lb/hour      tons/year
5. Method of Compliance :	Materials balance calculations based on unit run-time.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The requested allowable emissions are equal to the potential emissions, 0.0273 tpy VOC.

III. Part 9c - 1

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**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Pollutant Information Section**      1

**Allowable Emissions**      1

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	0.10      tons CO/year
4. Equivalent Allowable Emissions :	0.02      lb/hour      tons/year
5. Method of Compliance :	Materials balance calculations based on unit run-time.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The requested allowable emissions are equal to the potential emissions, 0.099 tpy CO.

III. Part 9c - 2

**Emissions Unit Information Section**                      1  
Tree of Life Steam Boiler (DAK-10)

**Pollutant Information Section**                      2

**Allowable Emissions**                      1

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	0.47                      tons NOx/year
4. Equivalent Allowable Emissions :	0.11                      lb/hour                      tons/year
5. Method of Compliance :	Materials balance calculations based on unit run-time.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The requested allowable emissions are equal to the potential emissions, 0.471 tpy NOx.

III. Part 9c - 3

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Effective : 3-21-96





**I. VISIBLE EMISSIONS INFORMATION**  
**(Regulated Emissions Units Only)**

**Emissions Unit Information Section**      1  
Tree of Life Steam Boiler (DAK-10)

**Visible Emissions Limitation :** Visible Emissions Limitation      1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions :      20      % Exceptional Conditions :      27      % Maximum Period of Excess Opacity Allowed :      6      min/hour
4. Method of Compliance :	EPA method 9, 60 minute test
5. Visible Emissions Comment :	

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

**Emissions Unit Information Section** \_\_\_\_\_

**Continuous Monitoring System :** Continuous Monitor \_\_\_\_\_

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information :  Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION**

**Emissions Unit Information Section**      1

Tree of Life Steam Boiler (DAK-10)

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

- The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.



2. Increment Consuming for Nitrogen Dioxide?

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

III. Part 12 - 2

III. Part 12 - 3  
DEP Form No. 62-210.900(1) - Form  
Effective : 3-21-96

## L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section

1

Tree of Life Steam Boiler (DAK-10)

### Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment B
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Attachment D
9. Other Information Required by Rule or Statue :	NA

### Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alternative Modes of Operation (Emissions Trading) :	NA

III. Part 13 - 1

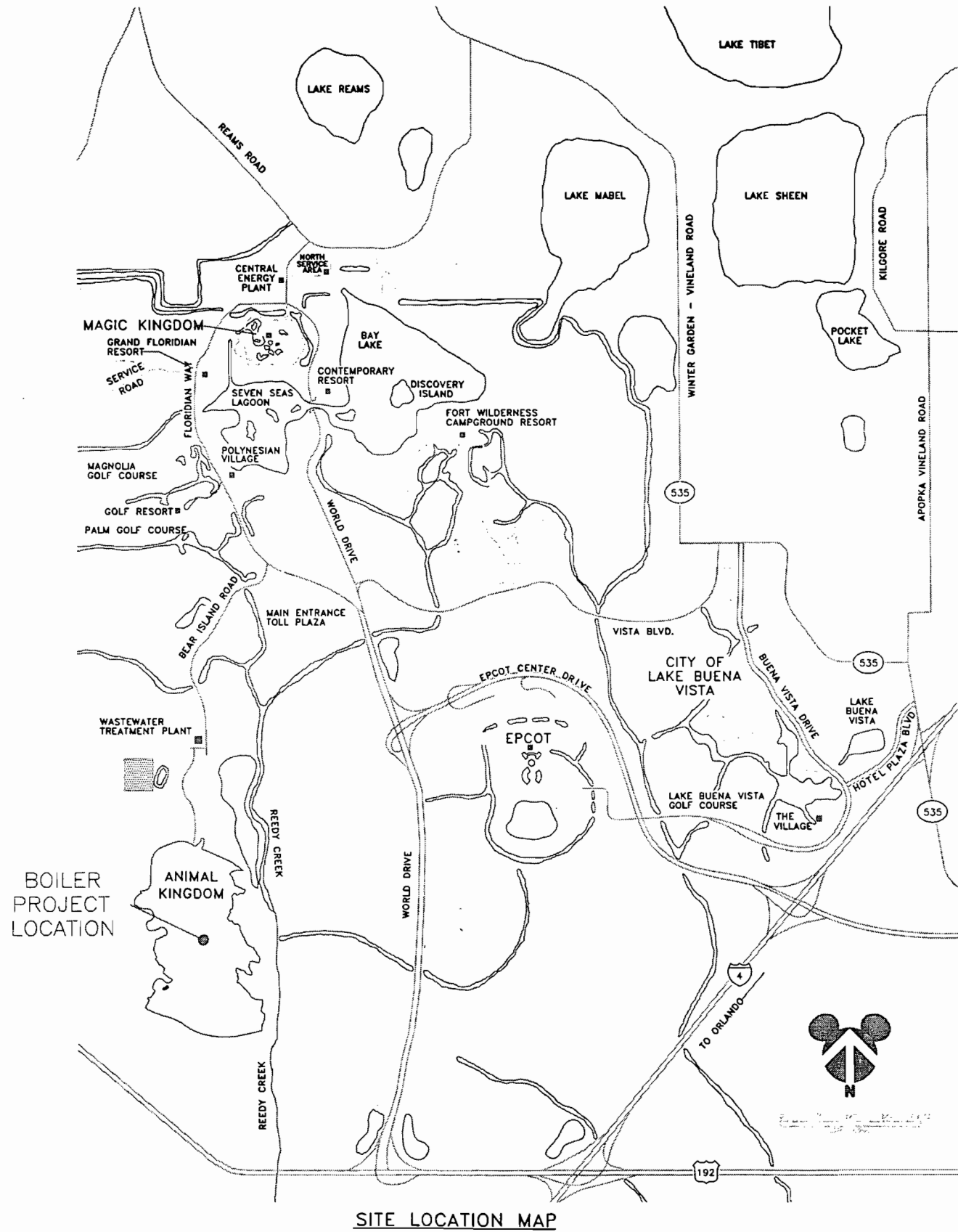
DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

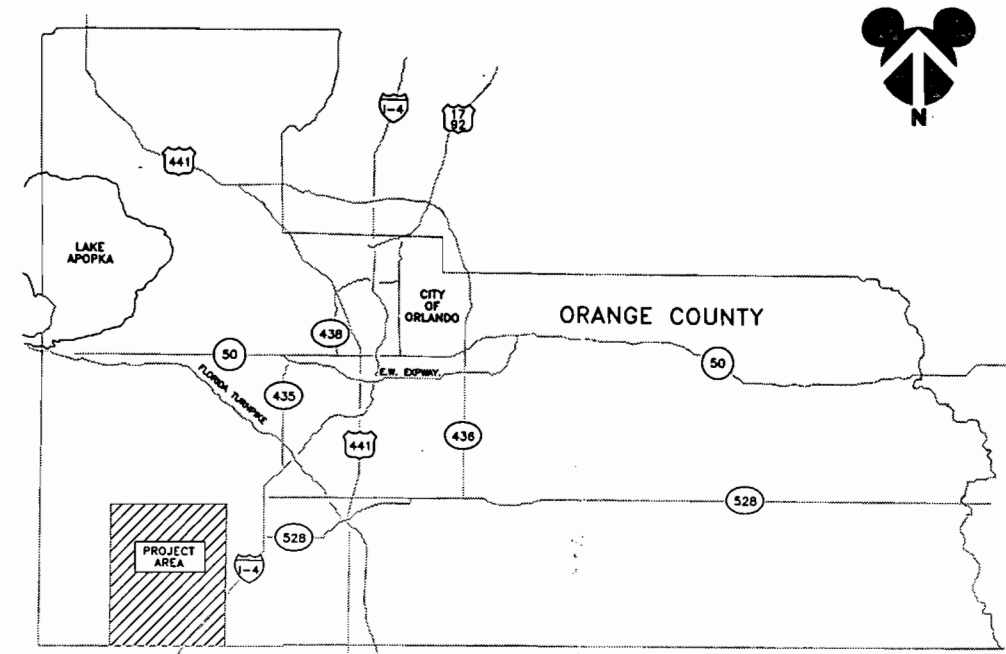
12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA
14. Acid Rain Application (Hard-copy Required) :	
NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

**ATTACHMENT A**

**AREA MAP SHOWING FACILITY LOCATION**



SITE LOCATION MAP



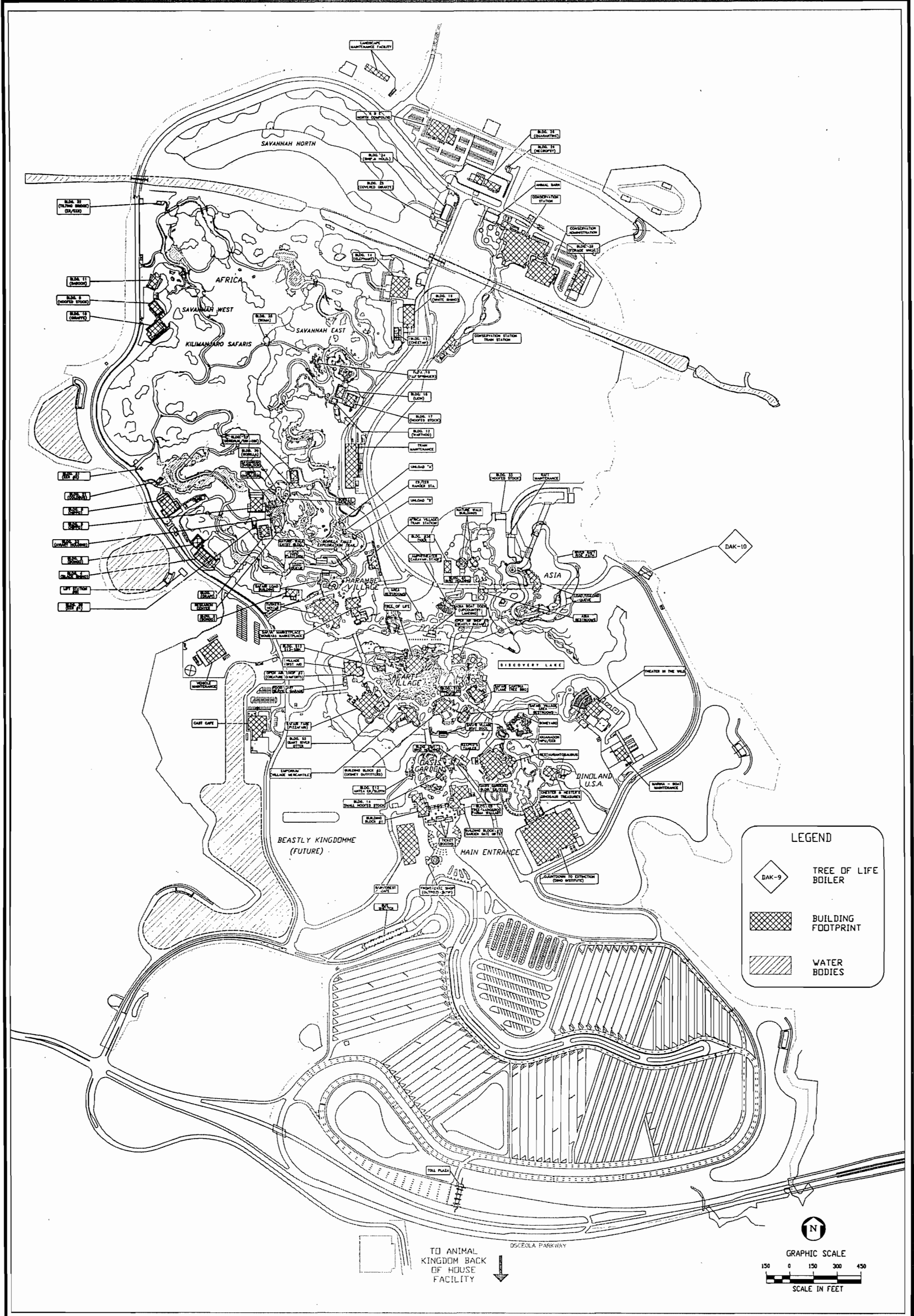
VICINITY MAP



LOCATION MAP

ATTACHMENT A  
 AREA MAP SHOWING FACILITY LOCATION  
 ANIMAL KINGDOM - TREE OF LIFE BOILER

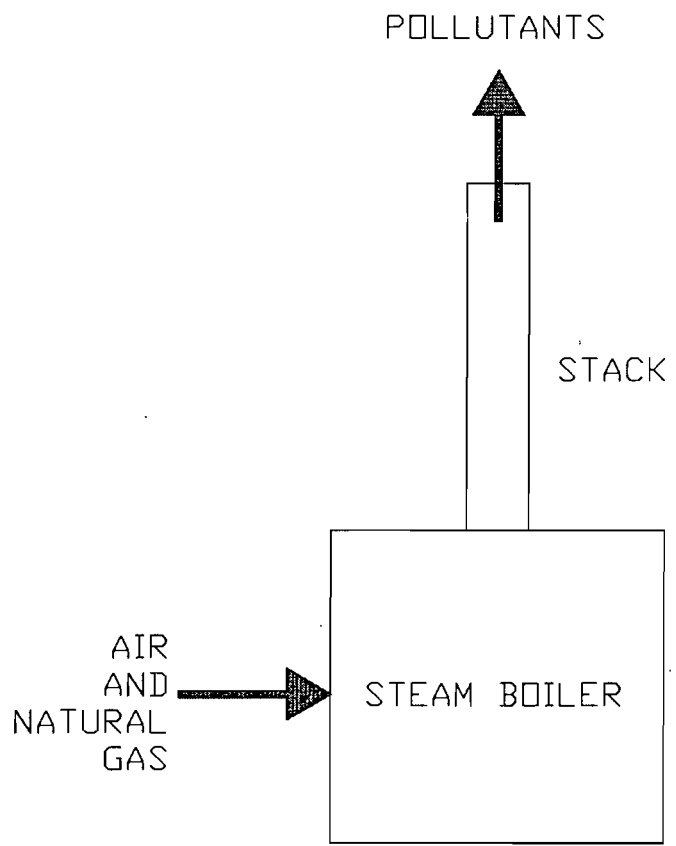
**ATTACHMENT B**  
**FACILITY PLOT PLAN**



ATTACHMENT B  
FACILITY PLOT PLAN  
DISNEY'S ANIMAL KINGDOM - TREE OF LIFE BOILER



**ATTACHMENT C**  
**PROCESS FLOW DIAGRAM**



ATTACHMENT C  
PROCESS FLOW DIAGRAM  
DISNEY'S ANIMAL KINGDOM -TREE OF  
LIFE STEAM EFFECTS BOILER

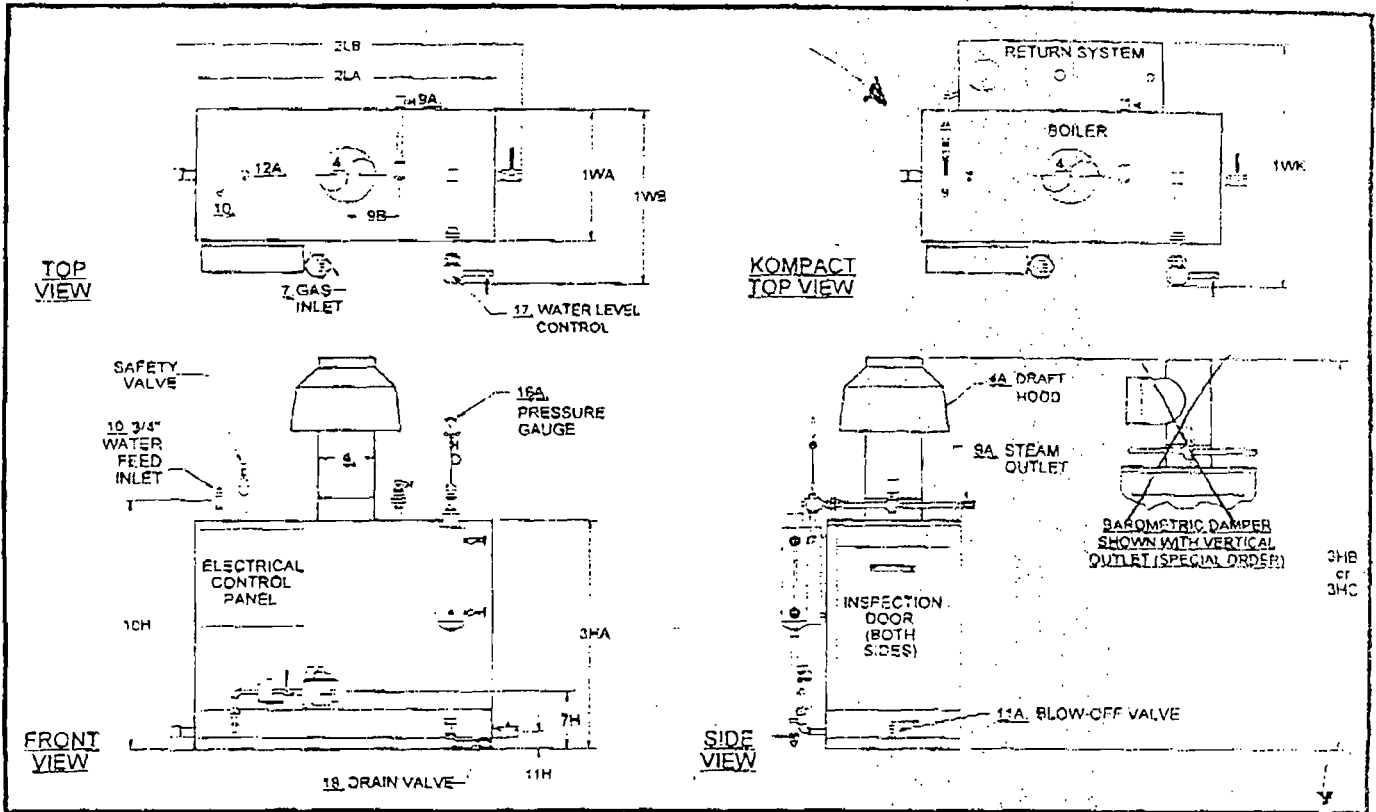


**ATTACHMENT D**

**TREE OF LIFE BOILER SPECIFICATIONS**

**Best Available Copy** PARKER INDUSTRIAL HORIZONTAL DRUM STEAM BOILER  
7 TO 25 H.P. - ATMOSPHERIC GAS FIRED

SPEC. SHEET D-103-1  
5A



NO.	DESCRIPTION	MODEL NO.	103-7	103-9.5	103-15	103-20	103-25
		HORSEPOWER	7 HP	9.5 HP*	15 HP	20 HP	25 HP
A	BTU Input	1000's BTU/HR.	301	398	645	860	1075
B	BTU Output at rating from and at 212°F	1000's BTU/HR.	241	318	516	688	860
C	Heating Surface	SQ. FT.	47	68	82.5	106	132
D	Rated Steaming Capacity from and at 212°F	LBS./HR.	242	328	518	690	863
1WA	Width Cabinet Only	IN.	21	24	27	30	36
1WB	Width Overall Including Controls	IN.	30	34	38	41	47
1WK	Width Parker Kompact - Boiler With Return System	IN.	40	44	48	54	60
2LA	Length of Cabinet Only	IN.	42	53	53	61	62
2LB	Length Overall Including Blow-Off Valve	IN.	50	61	61	70	71
3HA	Height of Cabinet Only	IN.	42	42	42	46	46
3HB	Height Overall Including Draft Hood - (Standard)	IN.	72	74	76	82	82
3HC	Height Overall Including Barometric Damper (Vert. Outlet/Horizont. Outlet) - (Spec. Order)	IN.	58/55	61/59	64/61	68/65	72/68
4A	Vent Stack Diameter with Draft Hood - (Standard)	IN.	8	10	12	14	14
4B	Vent Stack Diameter with Barometric Damper - (Special Order)	IN.	6	8	10	10	12
7A	Gas Inlet Size - Standard Nat. Gas/ Supply Press. Min: 7" WC; Max: 14" WC	IN.	3/4	3/4	1	1-1/2	1-1/2
7A1	Natural Gas Manifold Pressure at Burner	IN. WC	4	4	4	4	4
7B	Gas Inlet Size - High Press. Nat. Gas & Propane Gas / Supply Press. 1-5 PSI	IN.	3/4	3/4	3/4	1-1/2	1-1/2
7B1	Propane Gas Manifold Pressure at Burner	IN. WC	18	18	18	18	18
7H	Gas Inlet Height From Floor	IN.	11	11	12	13	13
9A HP	Steam Valve Size - High Pressure 50 to 250 PSI	IN.	3/4	1	1	1	1-1/4
9 LP	Steam Outlet Size - Low Pressure 15 PSI or less - (Special Order)	IN.	1-1/2	2	2	2	2-1/2
9B	Steam Outlet Location - From Center of Boiler	IN.	7	9	9	12	12
10H	Water Inlet Height From Floor	IN.	45	45	45	50	50
11A	Blow-off Valve Size	IN.	1	1	1	1-1/4	1-1/4
11H	Blowdown Line Height From Floor	IN.	3	3	3	3	3
12A HP	Safety Valve Drain Size - High Pressure - 100 PSI - Standard	OUTLET IN.	1	1	1	1-1/4	1-1/4
12A LP	Safety Valve Drain Size - Low Pressure - 15 PSI ("H" Code) - (Special Order)	OUTLET IN.	3/4	1-1/2	1-1/2	1-1/2	1-1/2
18	Water Column Drain Valve Size	IN.	3/4	3/4	3/4	1	1
J	Net Weight Of Boiler	LBS.	805	1080	1270	1680	1945
K	Domestic Crated Shipping Weight of Boiler	LBS.	950	1235	1430	1860	2175
L	Same with Return System or Kompact Mounting	LBS.	1240	1525	1720	2215	2530

MINIMUM LISTED CLEARANCES TO COMBUSTIBLE CONSTRUCTION: Cabinet Sides & Rear 12"; Cabinet Top 48"; Draft Hood Vent Connector 6"; Barometric Damper Chimney Connector 6".  
Recommended Clearances for Access: Inspection Doors 18"; Controls 24"; Electrical Panel 30"; Additional Space may be required by Local Codes

\* 10 H.P. available with same dimensions as 9.5 H.P. except: 430MBTU/Output, 344MBTU/Output, 340 Lbs./Hr., 1" Low Pressure Nat. Gas Inlet Size.

Notes: All of the above dimensions are for a standard trim model. Due to continuous improvement, specifications are subject to change without notice.

0001-15-00093