ATTACHMENT 3

PSD APPLICATION REPLACEMENT TABLES

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, 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 pollution 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 [X] 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 unit 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 2/1/99

(seal)

* Attach any exception to certification statement.

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, 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 pollution 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 [X] 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 unit 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.

Bernard F. Kody — Signature

2/1/99 — Date

(seal) 165

* Attach any exception to certification statement.

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, 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 pollution 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 [X] 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 unit 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.

Howard F. Kelly — 2/1/99

Signature — Date

(seal) FS

* Attach any exception to certification statement.

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, 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 pollution 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 [X] 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 unit 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 (seal) 155

Date: 2/1/99

* Attach any exception to certification statement.

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 1 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions: **44** lb/hour	**33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions: lb/hour	**15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted:	**SO2**
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	**103.8** lb/hour **82.6** tons/year
4. Synthetically Limited?	[**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor:	**See Comment**
Reference:	**Applicant**
7. Emissions Method Code:	[ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters):	**See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	**Emission Factor: 1 grain S per 100 CF gas; 0.05% S oil. lb/hr based on oil firing, 100% load, 32 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing, ISO conditions.**

Emissions Unit Information Section 1 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.05 % Sulfur Oil**	
4. Equivalent Allowable Emissions: **103.8** lb/hour	**77.6** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - 32 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **See Comment**	
4. Equivalent Allowable Emissions: **5.5** lb/hour	**9.3** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units: Pipeline Natural Gas. Gas firing, 1 gram/100 cf - 32 degrees F, 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **NOx**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **344** lb/hour **317.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load, 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 1 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **42 ppmvd**	
4. Equivalent Allowable Emissions:	**344** lb/hour **258.3** tons/year
5. Method of Compliance (limit to 60 characters): **CEM - 30 Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions is at 15% O2-100% load. Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions:	**64.9** lb/hour **109.9** tons/year
5. Method of Compliance (limit to 60 characters): **CEM 30-Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units is at 15% O2-100% load. Gas firing; 32 degrees F; 100% load, 3,390 hrs/yr; see Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **101.3** lb/hour **140.7** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing; 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 1 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **30 ppmvd**	
4. Equivalent Allowable Emissions: **101.3** lb/hour	**76** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **20 ppmvd**	
4. Equivalent Allowable Emissions: **70.1** lb/hour	**118.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **VOC**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **15.4** lb/hour **19** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 1 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: **15.4** lb/hour	**11.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: lb/hour	**13.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Additional Requested Allowable Emissions and Units: 100% load/100 ppmvd; 50% load. Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM10**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **44** lb/hour **41.5** tons/year

4. Synthetically Limited? [**x**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor:

   Reference: **Applicant**

7. Emissions Method Code:

   [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment PSD-FCLASS; Section 2.0; Appendix A.

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions: **44** lb/hour	**33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions: lb/hour	**15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [x] 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 the 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 the 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?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[X] 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 the source 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 the source 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 the 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	[X] C	[ ] E	[ ] Unknown
	SO_2	[X] C	[ ] E	[ ] Unknown
	NO_2	[X] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO_2	lb/hour		tons/year
	NO_2			tons/year
5.	PSD Comment (limit to 200 characters):			
	See Attachment PSD-FCLASS.			

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):

Distillate (No. 2) Fuel Oil

2. Source Classification Code (SCC):

20100101

3. SCC Units:

1,000 gallons used

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
14.6	**21,844**

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
0.05	

9. Million Btu per SCC Unit:

132

10. Segment Comment (limit to 200 characters):

Million Btu per SCC Unit = 131.8 (rounded to 132). Based on 7.1 lb/gal; LHV of 18,560 Btu/lb, - ISO conditions, 1,500 hrs/yr operation.

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 2 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: **44 lb/hr**		
4. Equivalent Allowable Emissions:	**44** lb/hour	**33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**		

B.

1. Basis for Allowable Emissions Code: **OTHER**		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: **lb/hr**		
4. Equivalent Allowable Emissions:	lb/hour	**15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**		

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **103.8** lb/hour **82.6** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **See Comment** Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emission Factor: 1 grain S per 100 CF gas; 0.05% S oil. lb/hr based on oil firing, 100% load, 32 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing, ISO conditions.**

Emissions Unit Information Section 2 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.05 % Sulfur Oil**	
4. Equivalent Allowable Emissions: **103.8** lb/hour	**77.6** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - 32 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **See Comment**	
4. Equivalent Allowable Emissions: **5.5** lb/hour	**9.3** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units: Pipeline Natural Gas. Gas firing, 1 gram/100 cf - 32 degrees F, 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **NOx**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **344** lb/hour **317.5** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load, 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 2 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **42 ppmvd**	
4. Equivalent Allowable Emissions: **344** lb/hour	**258.3** tons/year
5. Method of Compliance (limit to 60 characters): **CEM - 30 Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions is at 15% O2-100% load. Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: **64.9** lb/hour	**109.9** tons/year
5. Method of Compliance (limit to 60 characters): **CEM 30-Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units is at 15% O2-100% load. Gas firing; 32 degrees F; 100% load, 3,390 hrs/yr; see Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **101.3** lb/hour **140.7** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing; 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 2 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **30 ppmvd**	
4. Equivalent Allowable Emissions: **101.3** lb/hour	**76** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **20 ppmvd**	
4. Equivalent Allowable Emissions: **70.1** lb/hour	**118.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **VOC**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **15.4** lb/hour **19** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 2 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: **ppmv**		
4. Equivalent Allowable Emissions:	**15.4** lb/hour	**11.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**		

B.

1. Basis for Allowable Emissions Code: **OTHER**		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: **ppmvd**		
4. Equivalent Allowable Emissions:	lb/hour	**13.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Additional Requested Allowable Emissions and Units: 100% load/100 ppmvd; 50% load. Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**		

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM10**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 2 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions: **44** lb/hour	**33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions: lb/hour	**15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Distillate (No. 2) Fuel Oil**	
2. Source Classification Code (SCC): **20100101**	
3. SCC Units: **1,000 gallons used**	
4. Maximum Hourly Rate: **14.6**	5. Maximum Annual Rate: **21,844**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.05**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **132**	
10. Segment Comment (limit to 200 characters): **Million Btu per SCC Unit = 131.8 (rounded to 132). Based on 7.1 lb/gal; LHV of 18,560 Btu/lb, - ISO conditions, 1,500 hrs/yr operation.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 3 of 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**44 lb/hr**
4. Equivalent Allowable Emissions:	**44** lb/hour **33** tons/year
5. Method of Compliance (limit to 60 characters):	**Annual stack test; EPA Methods 5 or 17; if < 400 hours**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

B.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**lb/hr**
4. Equivalent Allowable Emissions:	lb/hour **15.3** tons/year
5. Method of Compliance (limit to 60 characters):	**VE Test < 20% opacity**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

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

Pollutant Detail Information:

1. Pollutant Emitted:	SO2
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	103.8 lb/hour 82.6 tons/year
4. Synthetically Limited?	[x] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor:	See Comment Reference: Applicant
7. Emissions Method Code:	[ ] 0 [ ] 1 [x] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters):	See Attachment PSD-FCLASS; Section 2.0; Appendix A.
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	Emission Factor: 1 grain S per 100 CF gas; 0.05% S oil. lb/hr based on oil firing, 100% load, 32 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing, ISO conditions.

Emissions Unit Information Section 3 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**0.05 % Sulfur Oil**
4. Equivalent Allowable Emissions:	**103.8** lb/hour **77.6** tons/year
5. Method of Compliance (limit to 60 characters):	**Fuel Sampling**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Oil firing - 32 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

B.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**See Comment**
4. Equivalent Allowable Emissions:	**5.5** lb/hour **9.3** tons/year
5. Method of Compliance (limit to 60 characters):	**Fuel Sampling**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Requested Allowable Emissions and Units: Pipeline Natural Gas. Gas firing, 1 gram/100 cf - 32 degrees F, 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

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

Pollutant Detail Information:

1. Pollutant Emitted: **NOx**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **344** lb/hour **317.5** tons/year

4. Synthetically Limited? [**x**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor:

   Reference: **Applicant**

7. Emissions Method Code:

   [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment PSD-FCLASS; Section 2.0; Appendix A.

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Lb/hr based on oil firing, 100% load, 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.

Emissions Unit Information Section 3 **of** 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **42 ppmvd**	
4. Equivalent Allowable Emissions:	**344** lb/hour **258.3** tons/year
5. Method of Compliance (limit to 60 characters): **CEM - 30 Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions is at 15% O2-100% load. Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions:	**64.9** lb/hour **109.9** tons/year
5. Method of Compliance (limit to 60 characters): **CEM 30-Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units is at 15% O2-100% load. Gas firing; 32 degrees F; 100% load, 3,390 hrs/yr; see Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **101.3** lb/hour **140.7** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing; 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 3 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **30 ppmvd**	
4. Equivalent Allowable Emissions:	**101.3** lb/hour **76** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **20 ppmvd**	
4. Equivalent Allowable Emissions:	**70.1** lb/hour **118.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **VOC**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **15.4** lb/hour **19** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 3 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmv**	
4. Equivalent Allowable Emissions: **15.4** lb/hour	**11.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: lb/hour	**13.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Additional Requested Allowable Emissions and Units: 100% load/100 ppmvd; 50% load. Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM10**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions: **44** lb/hour	**33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions: lb/hour	**15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Distillate (No. 2) Fuel Oil**	
2. Source Classification Code (SCC): **20100101**	
3. SCC Units: **1,000 gallons used**	
4. Maximum Hourly Rate: **14.6**	5. Maximum Annual Rate: **21,844**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.05**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **132**	
10. Segment Comment (limit to 200 characters): **Million Btu per SCC Unit = 131.8 (rounded to 132). Based on 7.1 lb/gal; LHV of 18,560 Btu/lb, - ISO conditions, 1,500 hrs/yr operation.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 4 of 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions:	**44** lb/hour **33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions:	lb/hour **15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **103.8** lb/hour **82.6** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **See Comment** Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emission Factor: 1 grain S per 100 CF gas; 0.05% S oil. lb/hr based on oil firing, 100% load, 32 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing, ISO conditions.**

Emissions Unit Information Section 4 of 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**0.05 % Sulfur Oil**
4. Equivalent Allowable Emissions:	**103.8** lb/hour **77.6** tons/year
5. Method of Compliance (limit to 60 characters):	**Fuel Sampling**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Oil firing - 32 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

B.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**See Comment**
4. Equivalent Allowable Emissions:	**5.5** lb/hour **9.3** tons/year
5. Method of Compliance (limit to 60 characters):	**Fuel Sampling**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Requested Allowable Emissions and Units: Pipeline Natural Gas. Gas firing, 1 gram/100 cf - 32 degrees F, 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

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

Pollutant Detail Information:

1. Pollutant Emitted: **NOx**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **344** lb/hour **317.5** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load, 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 4 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **42 ppmvd**	
4. Equivalent Allowable Emissions:	**344** lb/hour **258.3** tons/year
5. Method of Compliance (limit to 60 characters): **CEM - 30 Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions is at 15% O2-100% load. Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions:	**64.9** lb/hour **109.9** tons/year
5. Method of Compliance (limit to 60 characters): **CEM 30-Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units is at 15% O2-100% load. Gas firing; 32 degrees F; 100% load, 3,390 hrs/yr; see Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **101.3** lb/hour **140.7** tons/year

4. Synthetically Limited? [**x**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor:

   Reference: **Applicant**

7. Emissions Method Code:

   [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment PSD-FCLASS; Section 2.0; Appendix A.

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Lb/hr based on oil firing; 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.

Emissions Unit Information Section 4 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **30 ppmvd**	
4. Equivalent Allowable Emissions:	**101.3** lb/hour **76** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **20 ppmvd**	
4. Equivalent Allowable Emissions:	**70.1** lb/hour **118.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **VOC**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **15.4** lb/hour **19** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmv**	
4. Equivalent Allowable Emissions: **15.4** lb/hour	**11.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: lb/hour	**13.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Additional Requested Allowable Emissions and Units: 100% load/100 ppmvd; 50% load. Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM10**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 4 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions:	**44** lb/hour **33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions:	lb/hour **15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Distillate (No. 2) Fuel Oil**	
2. Source Classification Code (SCC): **20100101**	
3. SCC Units: **1,000 gallons used**	
4. Maximum Hourly Rate: **14.6**	5. Maximum Annual Rate: **21,844**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.05**	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **132**	
10. Segment Comment (limit to 200 characters): **Million Btu per SCC Unit = 131.8 (rounded to 132). Based on 7.1 lb/gal; LHV of 18,560 Btu/lb, - ISO conditions, 1,500 hrs/yr operation.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **44** lb/hour **41.5** tons/year

4. Synthetically Limited? [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor:

   Reference: **Applicant**

7. Emissions Method Code:

   [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment PSD-FCLASS; Section 2.0; Appendix A.

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.

Emissions Unit Information Section 5 of 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**44 lb/hr**
4. Equivalent Allowable Emissions:	**44** lb/hour **33** tons/year
5. Method of Compliance (limit to 60 characters):	**Annual stack test; EPA Methods 5 or 17; if < 400 hours**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

B.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**lb/hr**
4. Equivalent Allowable Emissions:	lb/hour **15.3** tons/year
5. Method of Compliance (limit to 60 characters):	**VE Test < 20% opacity**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **103.8** lb/hour **82.6** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **See Comment** Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emission Factor: 1 grain S per 100 CF gas; 0.05% S oil. lb/hr based on oil firing, 100% load, 32 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing, ISO conditions.**

Emissions Unit Information Section 5 of 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.05 % Sulfur Oil**	
4. Equivalent Allowable Emissions: **103.8** lb/hour	**77.6** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - 32 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **See Comment**	
4. Equivalent Allowable Emissions: **5.5** lb/hour	**9.3** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units: Pipeline Natural Gas. Gas firing, 1 gram/100 cf - 32 degrees F, 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **NOx**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **344** lb/hour **317.5** tons/year

4. Synthetically Limited? [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor:

   Reference: **Applicant**

7. Emissions Method Code:

   [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See Attachment PSD-FCLASS; Section 2.0; Appendix A.

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Lb/hr based on oil firing, 100% load, 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.

Emissions Unit Information Section 5 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **42 ppmvd**	
4. Equivalent Allowable Emissions: **344** lb/hour	**258.3** tons/year
5. Method of Compliance (limit to 60 characters): **CEM - 30 Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions is at 15% O2-100% load. Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: **64.9** lb/hour	**109.9** tons/year
5. Method of Compliance (limit to 60 characters): **CEM 30-Day Rolling Average**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested Allowable Emissions and Units is at 15% O2-100% load. Gas firing; 32 degrees F; 100% load, 3,390 hrs/yr; see Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **101.3** lb/hour **140.7** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing; 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 5 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **30 ppmvd**	
4. Equivalent Allowable Emissions:	**101.3** lb/hour **76** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **20 ppmvd**	
4. Equivalent Allowable Emissions:	**70.1** lb/hour **118.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 10; high and low loads**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **VOC**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **15.4** lb/hour **19** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, 100% load; 59 degrees F. Tons/yr based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 5 **of** 6

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmv**	
4. Equivalent Allowable Emissions: **15.4** lb/hour	**11.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing; 59 degrees F; 100% load; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **ppmvd**	
4. Equivalent Allowable Emissions: lb/hour	**13.6** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 25A; high and low load**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Additional Requested Allowable Emissions and Units: 100% load/100 ppmvd; 50% load. Gas firing; 32 degrees F; 100% load; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM10**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **44** lb/hour **41.5** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **Applicant**
7. Emissions Method Code: [ ] 0 [ ] 1 [**x**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment PSD-FCLASS; Section 2.0; Appendix A.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing, all loads. Tons/year based on 1,890 hrs/yr gas firing and 1,500 hrs/yr oil firing; ISO conditions.**

Emissions Unit Information Section 5 of 6
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **44 lb/hr**	
4. Equivalent Allowable Emissions: **44** lb/hour	**33** tons/year
5. Method of Compliance (limit to 60 characters): **Annual stack test; EPA Methods 5 or 17; if < 400 hours**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Oil firing - all loads; 1,500 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **lb/hr**	
4. Equivalent Allowable Emissions: lb/hour	**15.3** tons/year
5. Method of Compliance (limit to 60 characters): **VE Test < 20% opacity**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Gas firing - all loads; 3,390 hrs/yr. See Attachment PSD-FCLASS; Section 2.0; Appendix A.**	

2.0 PROJECT DESCRIPTION

2.1 SITE DESCRIPTION

The project site, shown in Figure 2-1, consists of 38 acres that is currently zoned for light industry which allows for the siting of an electric power plants. There is minimal industrial, commercial, and residential development within a 3-km radius of the site. The plant elevation will be approximately 25 feet above sea level. The terrain surrounding the site is flat.

Natural gas will be supplied by a lateral pipeline connected to the Florida Gas Transmission (FGT) natural gas pipeline located immediately to the west of the site. The site has access to transmission facilities from a 230 kV transmission line and electrical substation that is located to the north of the site. Water for the evaporative cooler, and NO_x control when firing oil, will be supplied by nearby groundwater or surface water sources, including reclaimed water and storm water, largely developed by the city of Cocoa. Potable water and additional fire protection supply water will be served from the potable water supply pipe near Townsend Road.

2.2 POWER PLANT

The proposed project will consist of five "F" class CTs and associated facilities. The annual capacity factor of the plant will be 39 percent which is equivalent to operating 3,390 hours/year at full load. Natural gas will be used as the primary fuel and fuel oil will be used as a backup fuel. Fuel oil usage will be limited to the equivalent of 1,500 hours/year at full load.

Plant performance with General Electric 7FA and Westinghouse 501F combustion turbines was developed for natural gas and oil; at 50, 75, and 100 percent load; and at 32°F, 59°F, and 95°F ambient dry bulb temperatures. Nominal part load percentages herein are relative to 100 percent load without evaporative cooling. Generic "F" class combustion turbine performance is based on a performance envelope and has been adjusted to reflect anticipated future performance improvements. In particular, the future "F" class combustion turbine performance assumes 7 percent higher power output and a 1 percent lower heat rate (see Appendix A).

Pollutant	Natural Gas	Distillate Oil
NO_x, ppmvd @ 15% O_2	9	42
CO, ppmvd (ppmvd @ 15% O_2)	20 (16)	30 (20)
VOC as CH_4, ppmvd (ppmvd @ 15% SO_2)	4 (32)	8 (5.4)
SO_x as SO_2	Calculated Based on Fuel (1.0 grains S/100 SCF)	Calculated Based on Fuel (0.05% sulfur)
PM_{10} lb/hr (dry filterable)	9	44

The maximum short-term emission rates (lb/hr) generally occur at base load, 32°F operation, where the CT has the greatest output and greatest fuel consumption.

Based on an ambient temperature of 59°F, the emission rates used to calculate maximum potential annual emissions for the proposed facility for regulated air pollutants are presented in Table 2-7 for one and 5 CTs. To produce the maximum annual emissions, the CTs are assumed to operate at baseload for 3,390 hours (39 percent capacity factor) firing natural gas for 1,890 hours and fuel oil for 1,500 hours. The potential emissions are based on the 59°F ambient air condition since it represents a nominal average between the higher emission levels at the 32°F ambient condition (winter) and the infrequent 95°F ambient condition (summer).

Process flow diagrams of the facility operating at summer and winter base load conditions are presented in Figures 2-2 and 2-3, respectively for the "F" Class CT.

Based on a review of the emission rates for natural gas and fuel oil combustion, the highest emission rates for the regulated pollutants generally occur when firing fuel oil. Combustion of natural gas and fuel oil result in slightly different exhaust flow gas rates and stack exit temperatures; however, the differences are minor. As a result of the higher emissions when firing oil, the air modeling analyses were based on determining maximum ground-level impacts with fuel oil.

As discussed in Section 6.0, the air modeling analyses that addressed compliance with ambient standards were based on modeling the CTs for the operating load and ambient temperature which produced the maximum impacts from the load impact analysis that was performed. Although the highest emission rates occur with low ambient temperatures (i.e., 32°F) and baseload conditions, the lowest exhaust gas flow rates occur with an ambient temperature of 95°F and 50 percent operating

Table 2-7a. Summary of Pollutant Emissions for the Proposed Oleander Power Project (Revised 12/18/98; 1,500 hours oil)
Proposed "F" Class Combustion Turbines, Simple-Cycle Mode

		Pollutant Emissions Proposed "F" Class Combustion Turbine								
		32 °F			59 °F			95 °F		
Load (%)	Pollutant	ppmvd	lb/hr	TPY	ppmvd	lb/hr	TPY	ppmvd	lb/hr	TPY
ONE UNIT										
Natural gas										
100	NOx	9.0	64.9	109.9	9.0	62.6	106.2	9.0	58.7	99.4
	CO	16.0	70.1	118.8	16.2	68.5	116.1	16.0	63.4	107.4
	SO_2	0.5	5.5	9.3	0.5	5.5	9.0	0.5	5.0	8.5
	VOC	3.2	8.0	13.6	3.2	7.8	13.3	3.2	7.3	12.3
	PM/ PM10	NA	9.0	15.3	NA	9.0	15.3	NA	9.0	15.3
75	NOx	9.0	53.9	91.3	9.0	50.9	86.3	9.0	48.2	81.8
	CO	15.8	57.4	97.3	16.1	55.4	93.9	16.7	54.5	92.3
	SO_2	0.5	4.5	7.6	0.5	4.5	7.6	0.5	4.0	7.0
	VOC	3.2	6.6	11.1	3.2	6.3	10.6	3.3	6.2	10.6
	PM/ PM10	NA	9.0	15.3	NA	9.0	15.3	NA	9.0	15.3
50	NOx	9.0	48.8	82.7	9.0	46.3	78.4	9.0	43.5	73.8
	CO	16.0	52.7	89.3	16.2	50.6	85.7	16.0	47.0	79.7
	SO_2	0.5	3.5	5.9	0.5	3.5	5.9	0.5	3.0	5.1
	VOC	3.2	6.0	10.2	3.2	5.8	9.8	3.2	5.4	9.1
	PM/ PM10	NA	9.0	15.3	NA	9.0	15.3	NA	9.0	15.3
Distillate Oil										
100	NOx	42.0	344.1	258.1	42.0	344.4	258.3	42.0	327.7	245.8
	CO	20.0	99.5	74.6	20.3	101.3	76.0	20.2	96.1	72.1
	SO_2	9.1	103.8	77.9	9.0	103.4	77.6	9.0	98.0	73.5
	VOC	5.3	15.1	11.3	5.4	15.4	11.6	5.4	14.8	11.1
	PM/ PM10	NA	44.0	33.0	NA	44.0	33.0	NA	44.0	33.0
75	NOx	42.0	297.4	223.1	42.0	281.0	210.8	42.0	263.5	197.6
	CO	19.9	85.7	64.3	20.2	82.4	61.8	20.6	78.8	59.1
	SO_2	9.1	90.1	67.6	9.1	84.8	63.6	8.9	78.0	58.5
	VOC	5.2	12.9	9.7	5.4	12.5	9.4	5.5	12.1	9.1
	PM/ PM10	NA	44.0	33.0	NA	44.0	33.0	NA	44.0	33.0
50	NOx	42.0	274.1	205.6	42.0	260.2	195.2	42.0	242.9	182.2
	CO	20.0	79.3	59.5	20.3	76.5	57.4	20.2	71.2	53.4
	SO_2	7.4	67.2	50.4	7.4	63.6	47.7	7.3	59.0	44.3
	VOC	5.3	12.0	9.0	5.4	11.6	8.7	5.4	11.0	8.3
	PM/ PM10	NA	44.0	33.0	NA	44.0	33.0	NA	44.0	33.0
Maximum Emissions (Maximum oil/ balance gas) (2)										
	NOx			319.4			317.5			301.2
	CO			140.9			140.7			131.9
	SO_2			83.0			82.6			78.2
	VOC			18.9			19.0			18.0
	PM10 (1)			41.5			41.5			41.5
5 UNITS										
Maximum Emissions (Maximum oil/ balance gas) (2)										
	NOx			1,597			1,587			1,506
	CO			704			704			660
	SO_2			415			413			391
	VOC			94			95			90
	PM10 (1)			208			208			208

(1) Emission rates are ppmvd at 15 percent O2. PM/PM10 are dry filterables only.
(2) Assumed hours firing natural gas and oil ar 1,500 and 1,890 , respectively.

3.5.2.3 Ambient Monitoring

Based on the estimated pollutant emissions from the proposed plant (see Table 3-4), a pre-construction ambient monitoring analysis is required for PM10, SO_2 , NO_2, CO, and O_3 (based on VOC emissions). If the net increase in impact of other pollutants is less than the applicable *de minimis* monitoring concentration (100 TPY in the case of VOC), then an exemption from the pre-construction ambient monitoring requirement may be obtained [52.21(i)(8)]. In addition, if an acceptable ambient monitoring method for the pollutant has not been established by EPA, monitoring is not required.

If pre-construction monitoring data are required to be submitted, data collected at or near the project site can be submitted, based on existing air quality data or the collection of onsite data.

As shown in Table 3-4, the proposed plant's impacts are predicted to be below the applicable *de minimis* monitoring concentration levels for all pollutants. Therefore, pre-construction monitoring is not required to be submitted for this project, except for O_3.

3.5.2.4 GEP Stack Height Impact Analysis

The GEP stack height regulations allow any stack to be at least 65 m [213 feet (ft)] high. The CT stacks for the project will be 60 ft. This stack height does not exceed the GEP stack height. However, as discussed in Section 6.0, Air Quality Modeling Approach, since the stack height is less than GEP, building downwash effects must be considered in the modeling analysis. As a result, the potential for downwash of the CTs' emissions caused by nearby structures are included in the modeling analysis.

3.5.3 NONATTAINMENT REVIEW

The project site is located in Brevard County, which is classified as an attainment area for all criteria pollutants. Therefore, nonattainment requirements are not applicable.

3.5.4 OTHER CLEAN AIR ACT REQUIREMENTS

The 1990 CAA Amendments established a program to reduce potential precursors of acidic deposition. The Acid Rain Program was delineated in Title IV of the CAA Amendments and required EPA to develop the program. EPA's final regulations were promulgated on January 11, 1993, and included

Table 3-3a. Maximum Emissions Due to the Proposed Oleander Power Project Compared to the PSD Significant Emission Rates

Pollutant	Pollutant Emissions (TPY)		PSD Review
	Potential Emissions from Proposed Facility[a]	Significant Emission Rate	
Sulfur Dioxide	413	40	Yes
Particulate Matter [PM(TSP)]	208	25	Yes
Particulate Matter (PM10)	208	15	Yes
Nitrogen Dioxide	1,587	40	Yes
Carbon Monoxide	704	100	Yes
Volatile Organic Compounds	95	40	Yes
Lead	NEG	0.6	No
Sulfuric Acid Mist	63.0	7	Yes
Total Fluorides	NEG	3	No
Total Reduced Sulfur	NEG	10	No
Reduced Sulfur Compounds	NEG	10	No
Hydrogen Sulfide	NEG	10	No
Mercury	NEG	0.1	No
MWC Organics (as 2,3,7,8-TCDD)	$<8.8 \times 10^{-8}$	3.5×10^{-6}	No
MWC Metals (as Be, Cd)	NEG	15	No
MWC Acid Gaser (as HCl)	17	40	No

Note: NEG = Negligible.

[a] Based on emissions from operating at baseload at 59°F; firing natural gas and distillate fuel oil for 1,890 and 1,500 hours per year per turbine for a total of five CTs, respectively (Refer to Table 2-7).

Table 3-4. Predicted Net Increase in Impacts Due To the Proposed Oleander Power Project Compared to PSD *De Minimis* Monitoring Concentrations

	Concentration (µg/m3)	
Pollutant	Predicted Increase in Impacts[a]	*De Minimis* Monitoring Concentration
Sulfur Dioxide	1.1	13, 24-hour
Particulate Matter (PM10)	0.8	10, 24-hour
Nitrogen Dioxide	0.3	14, annual
Carbon Monoxide	3.0	575, 8-hour
Volatile Organic Compounds	95 TPY	100 TPY

Note: NA = not applicable.
NM = no ambient measurement method.
TPY = tons per year.

[a] See Section 6.0 for air dispersion modeling results.

4.0 CONTROL TECHNOLOGY REVIEW

4.1 APPLICABILITY

The PSD regulations require new major stationary sources to undergo a control technology review for each pollutant that may potentially be emitted above significant amounts. The control technology review requirements of the PSD regulations are applicable to emissions of NO_x, SO_2, CO, VOC, and PM/PM10 (see Section 3.0). The maximum potential annual emissions of these pollutants from the proposed "F" Class CTs are summarized below (see Table 2-7):

Pollutant Emissions (TPY)

Pollutant	5 "F" Class CTs[a]
NO_x	1,587
SO_2	413
CO	704
VOC	95
PM/PM10	208

[a] Maximum emissions based on firing natural gas for 1,890 hours and distillate fuel oil for 1,500 hours at base load conditions and 59°F.

This section presents the applicable NSPS and the proposed BACT for these pollutants. The approach to the BACT analysis is based on the regulatory definitions of BACT, as well as EPA's current policy guidelines requiring a top-down approach. A BACT determination requires an analysis of the economic, environmental, and energy impacts of the proposed and alternative control technologies [see 40 CFR 52.21(b)(12); and Rule 62-212.200(40), and Rule 62-214.410, F.A.C.]. The analysis must, by definition, be specific to the project (i.e., case-by-case).

4.2 NEW SOURCE PERFORMANCE STANDARDS

The applicable NSPS for CTs are codified in 40 CFR 60, Subpart GG and summarized in Appendix B. The applicable NSPS emission limit for NO_x is 75 parts per million by volume dry (ppmvd) corrected for heat rate and 15 percent oxygen. For the CTs being considered for the project, the NSPS emission

While SCR is technically feasible for the project, SCR has not been applied to a simple cycle advanced combustion turbine of the size proposed for this project or to the amount of oil firing that may occur.

The recent permitting trend for advanced combustion turbines, even with combined cycle configuration, is the use of dry low-NO_x combustors. Indeed, most of the recent Florida projects have been permitted with this technology, including five projects in Florida (Florida Power & Light Martin Units 3 and 4; Central Florida Cogeneration Project; Hardee Unit 3 Project, and City of Tallahassee Project), and FPL Fort Myers Repowering Project.

As discussed in Section 2.1, the proposed CTs will be fired primarily with natural gas. Distillate oil will be used as backup fuel not to exceed 1,500 hours per year. Table 4-1 presents a summary of emissions with dry low-NO_x combustors and with dry low-NO_x combustors and SCR assuming 80 percent operating capacity at an ambient temperature of 59°F. The NO_x removed using SCR would be 232 TPY when firing oil and natural gas. The NO_x removed when firing oil is based on 1,500 hours per year. The NO_x removed when firing natural gas is based on 1,890 hours of operation.

4.3.2.2 Proposed BACT and Rationale

The proposed BACT for the project is advanced dry low-NO_x combustion technology. The proposed NO_x emissions level using this technology is 9 ppmvd (corrected to 15 percent oxygen) when firing natural gas under base load conditions. NO_x from oil firing will be controlled using water injection (42 ppmvd corrected to 15 percent oxygen). This combination of control technologies is proposed for the following reasons:

1. SCR was rejected based on technical, economic, environmental, and energy grounds. Table 4-2 summarizes these considerations which favor the dry low-NO_x pollution prevention technology.
2. The estimated incremental cost of SCR is approximately $14,000 per ton of NO_x removed and is similar to cost for other projects that have rejected SCR as being unreasonable. This is even more apparent if additional pollutant emissions due to SCR are considered.
3. Additional environmental impacts would result from SCR operation, including emissions of ammonia; from secondary emissions (to replace the lost generation); and from the generation of hazardous waste (i.e., spent catalyst replacement). While NO_x emissions would be reduced by

about 190 TPY per unit with SCR, the net emissions reduction would not be as great. There are three additional factors that must be considered:

a. Ammonia slip would occur, and it may be as high as 39.1 TPY per unit.

b. Additional particulate matter may be formed through the reaction of ammonia and sulfur oxides forming ammonium salts. As much as 25.6 TPY per unit additional particulate matter may be formed.

c. SCR will require energy for system operation and reduce the efficiency of the combustion turbine. This lost energy would have to be replaced since the proposed project would be an efficient peaking power plant while operating. Any peaking power plants replacing this lost energy would be lower on the dispatch list and inevitably more polluting. Conservatively, this lost energy would result in the emissions of an additional 32.8 TPY of criteria pollutants. Additional emissions of carbon dioxide would also result.

d. The "net" cost effectiveness cold be a high as $28,000 per ton of pollutant removed.

4. The energy impacts of SCR will reduce potential electrical power generation by more than 4.2 million kilowatt hours (kWh) per year. This amount of energy is sufficient to provide the monthly electrical needs of 950 residential customers.

5. The proposed BACT (i.e., dry low-NO_x combustion) provides the most cost effective control alternative, is pollution preventing and results in low environmental impacts (less than the significant impact levels). Dry low-NO_x combustion at the proposed emissions levels has been adopted previously in BACT determinations. Indeed, compared to conventional CTs, the proposed BACT will result in 10 percent less NO_x emission from the same amount of generation.

The analyses of economic, environmental, and energy impacts follow.

4.3.2.3 Impacts Analysis

Economic--The total capital costs of SCR for the proposed plant are $2,641,600. The total annualized cost of applying SCR with dry low-NO_x combustion is $2,378,500. Appendix B contains the detailed cost estimates for the capital and annualized costs. The incremental cost effectiveness of adding SCR

to the dry low-NO_x combustors and water injection (for oil firing) is estimated at $11,344 per ton of NO_x removed.

Environmental--The maximum predicted NO_x impacts using the dry low-NO_x technology are all considerably below the NO_2 PSD Class II increment of 25 $\mu g/m^3$, annual average, and the AAQS of 100 $\mu g/m^3$, annual average. Indeed, the maximum annual impact for the project is 0.30 $\mu g/m^3$, which is about 31 percent of the significant impact level. While additional controls beyond dry low-NO_x combustors (i.e., SCR and SCR with water injection) would reduce emissions, the effect will not be significant and much less than 1 percent of the PSD increment and the AAQS for the project.

The use of dry low-NO_x combustor technology is truly "pollution prevention". In contrast, use of SCR on the proposed project will cause emissions of ammonia and ammonium salts, such as ammonium sulfate and bisulfate. Ammonia emissions associated with SCR are expected to be up to 10 ppm based on reported experience; previous permit conditions have specified this level. Indeed, ammonia emissions could be as high as 39.1 TPY/ per unit for the project. Potential emissions of ammonium sulfate and bisulfate will increase emissions of PM10; up to 25.6 TPY/per unit could be emitted.

The electrical energy required to run the SCR system and the back pressure from the turbine will reduce the available power from the project. This power, which would otherwise be available to the electrical system, will have to be replaced by other less efficient units. The replacement power will cause air pollutant emissions that would not have occurred without SCR. These "secondary" emissions, coupled with potential emissions of ammonia and ammonium salts, are presented in Table 4-3. This table shows the emissions balance for the project with and without SCR. As shown, the net reduction in emissions with SCR when all criteria pollutants are considered will be 92.5 TPY. In addition to criteria pollutants, additional secondary emissions of carbon dioxide would be emitted and were included in Table 4-3. As noted from this table, the emissions including CO_2 would be greater with SCR than that proposed using dry low-NO_x combustion technology.

The replacement of the SCR catalyst will create additional economic and environmental impacts since certain catalysts contain materials that are listed as hazardous chemical wastes under Resource Conservation and Recovery Act (RCRA) regulations (40 CFR 261). In addition, SCR will require the

Table 4-1. NO_x Emission Estimates (TPY) of BACT Alternative Technologies (per Unit)

Alternative BACT Control Technologies	Operating Mode[a]		
	Oil	Gas	Total
NO_x Emission (TPY)			
Dry Low-NO_x (DLN) only	258	59	317
DLN with SCR[b]	103	24	127
Reduction	(155)	(35)	(190)
Basis of Emissions (ppmvd)			
DLN only	42	9	
DLN with SCR	16.8	3.6	
Hours of Operation	1,500	1,890	3,390

Note: DLN = Dry low-NO_x.
SCR = selective catalytic reduction.
TPY = tons per year.

[a] Emission rates were based on a "F" class combustion turbine operating at 100-percent capacity and firing natural gas for 1,890 hours and distillate fuel oil for 1,500 hours. Emission data are based on an ambient temperature of 59°F at maximum emission rates.

[b] Based on primary emissions with SCR; no account is made for additional emissions (secondary) due to lost energy from heat rate penalty and electrical usage for SCR operation (see Table 4-3).

Table 4-2. Comparison of Alternative BACT Control Technologies for NO_x (per Unit)

	Alternative BACT Control Technologies	
	DLN Only	SCR
Technical Feasibility	Feasible	Feasible for gas
Economic Impact[a]		
Capital Costs	included	$7,507,200
Annualized Costs	included	$2,622,680
Cost Effectiveness		
NO_x Removed (per ton of NO_x)	NA	$13,757
NO_x Removed (per ton of total pollutants)	NA	$28,344
Environmental Impact[b]		
Total NO_x (TPY)	317	127
NO_x Reduction (TPY)	NA	(190)
Ammonia Emissions (TPY)	0	39.1
PM Emissions (TPY)	0	25.6
Secondary Emissions (TPY)	0	32.8
Net Emission Reduction (TPY)	NA	(92.5)
Energy Impacts[c]		
Energy Use (kWh/yr)	0	4,200,210
Energy Use (mmBtu/yr) at 10,000 Btu/kWh	0	50,400
Energy Use (mmcf/yr) at 1,000 Btu/cf for natural gas	0	41

[a] See Appendix B for detailed development of capital costs (including recurring costs) and annualized costs.

[b] See emission data presented in Table 4-3.

[c] Energy impacts are estimated due to the lost energy from heat rate penalty and electrical usage for the SCR operation at 3,390 hours per year. Lost energy is based on 0.5 percent of 192 MW. SCR electrical usage is based on 0.080 MWh per SCR system and 0.20 MWh for cooling fan.

Table 4-3. Maximum Potential Incremental Emissions (TPY) with Selective Catalytic Reduction

Pollutants	Incremental Emissions (TPY) of Project with SCR		
	Primary	Secondary[a]	Total
Particulate	25.6[b]	0.96	25.6
Sulfur Dioxide	--	12.7	12.7
Nitrogen Oxides	(190)[c]	17.6	(172.4)
Carbon Monoxide	--	1.21	1.21
Volatile Organic Compounds	--	0.30	0.3
Ammonia	39.1[d]	0	39.1
Total	(125.3)	32.8	(92.5)
Carbon Dioxide[e]	--	4,330	4,330

Note: Btu/kWh = British thermal units per kilowatt-hour
CT = combustion turbine
MW = megawatt
% = percent
SCR = selective catalytic reduction
TPY = tons per year
-- = no differences in the project's emissions with SCR and without SCR

[a] Lost energy from heat rate penalty and electrical usage for 3,390 hours per year operation (0.5% of 192 MW per CT plus 0.080 MWh for SCR system and 0.2 MWh for dilution fan). Assumes baseloaded oil-fired unit would replace lost energy. EPA emission factors based on oil-fired peaking turbines used were (lb/10^6 Btu): PM = 0.038; SO_2 = 0.505; NO_x = 0.698, CO = 0.048, and VOC = 0.017. Example calculation for PM is ((0.5% x 192 + 0.28) MW x 12,000 Btu/kWh x 1,000 kW/MW x 3,390 hr/yr x 0.038 lb pm/10^6 Btu ÷ 2,000 lb/ton = 0.96 TPY.

[b] Assume 5% SO_2 conversion in catalyst and SO_3 and the SO_3 formed in the combustion process reacts with ammonia to form ammonium sulfate; 82.6 TPY SO_2 x 0.05 = 4.13 TPY SO_2; 4.13 TPY SO_2 x 98 MW of H_2SO_4 ÷ 64 MW SO_2 = 6.3 TPY H_2SO_4; 12.7 TPY H_2SO_4 from combustion of oil and gas for total H_2SO_4 = 19.0 TPY SO_3 x 132 (MW of ammonia salt) ÷ 98 (MW of H_2SO_4) = 25.6 TPY.

[c] Based on the maximum difference between the project's emissions with SCR and without SCR (see Table 4-1).

[d] 10 ppm ammonia slip (ideal gas law): 2,591,756 acfm x (10 ppm ÷ 10^6) x 17 x 2,116.8 ÷ 1,545 ÷ (460 + 1,111) x 60 x 3,390 ÷ 2,000 = 39.1 TPY (flow average of gas and oil).

[e] Reflects differential emissions due to lost energy efficiency with SCR (i.e., calculated from total heat input lost; 1.24 MW times 12,000 Btu/kWh; CO_2 calculated based on 85.7% carbon in fuel oil and 18,300 Btu/lb for 0.5% sulfur oil).

Table B-4a. Annualized Cost for Selective Catalytic Reduction for Frame "F" Simple Cycle Operation

Cost Component	Costs	Basis of Cost Component
Direct Annual Costs		
Operating Personnel	$24,960	24 hours/week at $20/hr
Supervision	$3,744	15% of Operating Personnel;OAQPS Cost Control Manual
Maintenance - Labor	$13,104	0.5 hr per shift, $24/hr; OAQPS Cost Manual
- Materials	$13,104	100% of maintenance labor; OAQPS Cost Manual
Ammonia	$83,037	$300 per ton NH3 Aqueous
PSM/RMP Update	$5,000	Engineering Estimate
Inventory Cost	$93,044	Capital Recovery (11.74%) for 1/3 catalyst
Catalyst Disposal Cost	$35,793	$28/1,000 lb/hr mass flow over 3 years; developed from vendor quotes
Contingency	$8,154	3% of Direct Annual Costs
Total Direct Annual Costs (TDAC)	$279,940	
Energy Costs		
Electrical	$47,460	80kW/h for SCR; 200 kW/h for cooling fan@ $0.05/kWh times Capacity Factor
Heat Rate Penalty	$162,551	0.5% of MW output; EPA, 1993 (Page 6-20)
MW Loss Penalty	$230,160	3 days lost energy costs @ $0.05 kWh each three period
Fuel Escalation	$13,205	Escalation of fuel over inflation; 3% of energy costs
Contingency	$13,601	3% of Energy Costs
Total Energy Costs (TEC)	$466,977	
Indirect Annual Costs		
Overhead	$17,222	60% of Operating/Supervision Labor and Ammonia
Property Taxes, Insurance, Admin.	$300,289	4% of Total Capital Costs
Annualized Total Direct Capital	$602,665	11.75% Capital Recovery Factor of 10% over 20 years times sum of TDCC, TDIC, and TInC
Annualized Total Direct Recurring	$955,587	40.21% Capital Recovery Factor of 10% over 3 years times RCC
Total Indirect Annual Costs (TIAC)	$1,875,763	
TOTAL ANNUALIZED COSTS	$2,622,680	Sum of TDAC, TEC and TIAC
COST EFFECTIVENESS	$13,757	

ATTACHMENT 4

CORRESPONDENCE LETTERS FROM FGT AND SONAT