P 408 530 328

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to James V. Chisholm	
Street and No. 1300 9th Street	
P.O., State and ZIP Code St. Cloud, FL 32769	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 7/12/83	

PS Form 3800, Feb. 1982

PS Form 3811, Jan. 1979

SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
   - ☒ Show to whom and date delivered..... ¢
   - ☐ Show to whom, date and address of delivery..... ¢
   - ☐ RESTRICTED DELIVERY
     Show to whom and date delivered..... ¢
   - ☐ RESTRICTED DELIVERY.
     Show to whom, date, and address of delivery.$

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
James V. Chisholm
1300 9th Street
St. Cloud, FL 32769

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	P408530328	

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐Addressee ☐Authorized agent

J. Malone

4. DATE OF DELIVERY 7/14/83
POSTMARK ST. CLOUD, FL JUL 14 1983

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:
CLERK'S INITIALS

☆GPO : 1979-300-459

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

July 8, 1983

James V. Chisholm, City Manager
1300 9th Street
St. Cloud, Florida 32769

Dear Mr. Chisholm:

Enclosed is Permit Numbers AC 49-61237 and 49-61239 dated July 7, 1983, to the City of St. Cloud, issued pursuant to Section 403, Florida Statutes.

Acceptance of the permit constitutes notice and agreement that the Department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,

for C. H. Fancy, P.E.
Deputy Bureau Chief
Bureau of Air Quality
Management

CHF/bjm

Enclosure

cc: Roxy S. Howse, P.E., Public Works Director/City Engineer
Charles M. Collins, St. Johns River District

FINAL DETERMINATION

The City of St. Cloud's applications for permits to replace two existing diesel generators at the City's Municipal Power Plant in Osceola County, Florida, have been reviewed by the Bureau of Air Quality Management. Public Notice of the Department's Intent to Issue the construction permits was published in the Orlando Sentinel on March 31, 1983.

Copies of the preliminary determination have been available for public inspection at the Department's St. Johns River District Office in Orlando and the Bureau of Air Quality Management Office in Tallahassee.

There were no letters of response as a result of the public notice period.

The final action of the Department will be to issue the permit as noticed during the public notice period.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

Permit Number: AC 49-61237
Expiration Date: September 30, 1983
County: Osceola
Latitude/Longitude: 28° 14' 41"N/
81° 17' 17"W
Project: 2,880 BHP
Diesel Generator (Unit #3)

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the installation of a 2,880 BHP diesel generator (unit #3), to be located at the City of St. Cloud Municipal Power Plant in Osceola County, Florida.

The construction shall be in accordance with the attached permit application, plans and documents except as otherwise noted on pages 5, 6 and 7, "Specific Conditions".

Attachment:
Application to Construct Air Pollution Sources, DER Form 17-1.122(16), received on March 17, 1983.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The new source shall be constructed in accordance with the capacities and specifications stated in the application.

2. The maximum emission rates for the gas engine shall not exceed the following emission limits in pounds per hour.

Opacity	PM	SO_2	CO	NOx	HC
5%	0.63	0.51	10.2	31.7	2.54

3. This unit shall be allowed to operate 2190 hours per year.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

4. The fuel used to fire this engine shall be natural gas and #2 fuel oil with a 0.4 percent sulfur content (fuel oil shall not be used over 5% of the time).

5. Before this construction permit expires, the gas engine will be tested for sulfur dioxide, visible emissions and nitrogen oxides. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference methods in Chapter 17-2, FAC.

a. Compliance with the opacity limitation will be determined by reference method 9.

b. Compliance with the NO_x emission limit shall be determined by reference method 7 if visible emissions exceed 5% opacity.

c. Compliance with the sulfur dioxide emission limits will be determined by method 6 or by calculations based on fuel analysis (ASTM D1072-70 or D2880-71) for sulfur content.

The Department will be notified 30 days in advance of the compliance test. The test will be conducted at permitted capacity $\pm$ 10%.

6. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the applicant.

7. The applicant shall report any delays in construction and completion of this unit to the Department's St. Johns River District office.

8. The applicant will demonstrate compliance with the conditions of the construction permit, and submit a complete application for an operating permit to the Department's St. Johns River District office prior to 90 days of the expiration date of the construction permit. The applicant may continue to operate in compliance with all terms of the construction permit until its expiration date or issuance of an operating permit.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

9. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.

10. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700, FAC.

11. This permit replaces operating permit No. AO 49-4553. The applicant shall return this operating permit to the St. Johns River District office within three(3) months of start-up of the unit.

12. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 7 day of July, 1983

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Tamara Cole for
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

Permit Number: AC 49-61239
Expiration Date: September 30, 1983
County: Osceola
Latitude/Longitude: 28° 14' 41"N/ 81° 17' 17"W
Project: 2,880 BHP Diesel Generator (Unit #1)

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the installation of a 2,880 BHP diesel generator (unit #1), to be located at the City of St. Cloud Municipal Power Plant in Osceola County, Florida.

The construction shall be in accordance with the attached permit application, plans and documents except as otherwise noted on pages 5, 6 and 7 "Specific Conditions".

Attachment:
Application to Construct Air Pollution Sources, DER Form 17-1.122(16), received on March 17, 1983.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The new source shall be constructed in accordance with the capacities and specifications stated in the application.

2. The maximum emission rates for the gas engine shall not exceed the following emission limits in pounds per hour.

Opacity	PM	SO_2	CO	NOx	HC
5%	0.63	0.51	10.2	31.7	2.54

3. This unit shall be allowed to operate 2190 hours per year.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

4. The fuel used to fire this engine shall be natural gas and #2 fuel oil with a 0.4 percent sulfur content (fuel oil shall not be used over 5% of the time).

5. Before this construction permit expires, the gas engine will be tested for sulfur dioxide, visible emissions and nitrogen oxides. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference methods in Chapter 17-2, FAC.

a. Compliance with the opacity limitation will be determined by reference method 9.

b. Compliance with the NO_x emission limit shall be determined by reference method 7 if visible emissions exceed 5% opacity.

c. Compliance with the sulfur dioxide emission limits will be determined by method 6 or by calculations based on fuel analysis (ASTM D1072-70 or D2880-71) for sulfur content.

The Department will be notified 30 days in advance of the compliance test. The test will be conducted at permitted capacity $\pm$ 10%.

6. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the applicant.

7. The applicant shall report any delays in construction and completion of this unit to the Department's St. Johns River District office.

8. The applicant will demonstrate compliance with the conditions of the construction permit, and submit a complete application for an operating permit to the Department's St. Johns River District office prior to 90 days of the expiration date of the construction permit. The applicant may continue to operate in compliance with all terms of the construction permit until its expiration date or issuance of an operating permit.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

9. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.

10. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700, FAC.

11. This permit replaces current operating permit. The applicant shall return this operating permit to the St. Johns River District office within three(3) months of start-up of the unit.

12. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 7 day of July, 1983

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Terry Cole for
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional [ ]	Reply Required [ ]	Info. Only [ ]
Date Due: _____	Date Due: _____	

TO: Victoria J. Tschinkel

FROM: Clair Fancy

DATE: July 5, 1983

SUBJ: Approval of Attached Air Construction Permits

Attached for your approval and signature are two Air Construction Permits for which the applicant is the City of St. Cloud. The proposed project is to replace two existing diesel generators at the city's municipal power plant in Osceola County.

Day 90, after which the permits would be issued by default, is July 13, 1983.

The Bureau recommends your approval and signature.

CF/pa

Attachment

Check Sheet

Company Name: St. Cloud, City of
Permit Number: AC 49-0601239, -0601237
PSD Number:
Permit Engineer:

Application:

☑ Initial Application
- ☐ Incompleteness Letters
- ☐ Responses
- ☐ Waiver of Department Action
- ☐ Department Response
- ☐ Other

Cross References:
- ☐ AO 49-004553
- ☐
- ☐

Intent:

☐ Intent to Issue
☑ Notice of Intent to Issue
☑ Technical Evaluation
☐ BACT or LAER Determination
☑ Unsigned Permit

Correspondence with:
- ☐ EPA
- ☐ Park Services
- ☐ Other

☑ Proof of Publication
- ☐ Petitions - (Related to extensions, hearings, etc.)
- ☐ Waiver of Department Action
- ☐ Other

Final
Determination:

☑ Final Determination
☑ Signed Permit
☐ BACT or LAER Determination
- ☐ Other

Post Permit Correspondence:
- ☐ Extensions/Amendments/Modifications
- ☐ Other

CITY OF ST. CLOUD, FLORIDA

1300 NINTH STREET• ST. CLOUD, FLORIDA 32769

PHONE:
(305) 892-2161

June 6, 1983

Patty

Mr. C.H. Fancy, P.E.
Deputy Chief/Bureau of
Air Quality Management
STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32301-8241

DER
JUN 08 1983
BAQM

REFERENCE: UNITS #1, UNITS #3 MUNICIPAL
POWER PLANT - LEGAL ADVERTISEMENT

Dear Mr. Fancy:

Per your request of May 13, 1983, attached herewith, is a copy of the legal advertisement per your requirements.

Yours very truly,

Roxy S. Howse, P.E.
Public Works Director/City Engineer

RSH/kb

cc: James V. Chisholm, City Manager
Charles M. Collins, DER/St. Johns River District

The Orlando Sentinel

Published Daily
Orlando, Orange County, Florida

ADVERTISING CHARGE $42.42

State of Florida } ss
COUNTY OF ORANGE

Before the undersigned authority personally appeared Catherine Deering, who on oath says that she is the Legal Advertising Representative of the Orlando Sentinel, a Daily newspaper published at Orlando, in Orange County, Florida; that the attached copy of advertisement, being a Notice of Proposed Agency Action in the matter of Permits for replacement of two existing diesel generators in the ____ Court, was published in said newspaper in the issues of May 31, 1983

Affiant further says that the said Orlando Sentinel is a newspaper published at Orlando, in said Orange County, Florida, and that the said newspaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as second-class mail matter at the post office in Orlando, in said Orange County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Catherine Deering

Sworn to and subscribed before me this 2nd day of June A.D., 1983

Virginia M Hollingsworth
Notary Public

Seal

Notary Public, State of Florida at Large
My Commission Expires July 13, 1985
Bonded by American Fire & Casualty Co.

FORM NO. AD-262

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue permits to the City of St. Cloud for the replacement of two existing diesel generators with two identical generators (units =1 and =3) at the City of St. Cloud Municipal Power Plant in Osceola County, Florida. A determination of Best Available Control Technology (BACT) was not required.

A person who is substantially affected by the Department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapters 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The applications, technical evaluation and department intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

DER Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301
DER St. Johns River District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Comments on this action shall be submitted in writing to Bill Thomas of Tallahassee office within thirty (30) days of this notice.

CL-433 May31,1983

No. 0157007

RECEIPT FOR CERTIFIED MAIL

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See Reverse)

SENT TO
James V. Chisholm

STREET AND NO.

P.O., STATE AND ZIP CODE

POSTAGE		$
CONSULT POSTMASTER FOR FEES — OPTIONAL SERVICES	CERTIFIED FEE	¢
	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM AND DATE DELIVERED	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE — SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		$

POSTMARK OR DATE

5/16/83

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979

SENDER: Complete items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
   - [X] Show to whom and date delivered..... ¢
   - [ ] Show to whom, date and address of delivery... ¢
   - [ ] RESTRICTED DELIVERY
     Show to whom and date delivered..... ¢
   - [ ] RESTRICTED DELIVERY.
     Show to whom, date, and address of delivery.$

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
James V. Chisholm
1300 9th Street
St. Cloud, FL 32769

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0157007	

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE [ ]Addressee [ ]Authorized agent

4. DATE OF DELIVERY 5/19/83

POSTMARK: SAINT CLOUD, FL MAY 19 1983

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆GPO : 1979-300-459

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

May 13, 1983

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. James V. Chisholm
City Manager
City of St. Cloud
1300 9th Street
St. Cloud, Florida 32769

Dear Mr. Chisholm:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permits for the replacement of two existing diesel generators with two identical generators (units #1 and #3) at the City of St. Cloud Municipal Power Plant in Osceola County, Florida.

Before final action can be taken on your proposed permits, you are required by Florida Administrative Code Rule 17-1.62(3) to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Osceola County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice will be grounds for denial of the permits.

The Preliminary Determination and proposed permits constitute a proposed action of the department and are subject to administrative hearing under the provisions of Chapter 120, Florida Statutes, if requested within fourteen days from receipt of this letter. Any petition for hearing must comply with the requirements of Florida Administrative Code Rule 28-5.201 and be filed with the Office of General Counsel, Florida Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to file a request for hearing within fourteen days shall constitute a waiver of your right to a hearing. Filing is deemed complete upon receipt by the Office of General Counsel.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Attachment

cc: Roxy W. Howse, P.E., Public Works Director/City Engineer,
City of St. Cloud
Charles M. Collins, DER St. Johns River District

Technical Evaluation
and
Preliminary Determination

City of St. Cloud Florida
Osceola County, Florida

Diesel Engine Generators

Permit Numbers AC 49-61237
AC 49-61239

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

May 12, 1983

NOTICE OF PROPOSED AGENCY ACTION

The Department of Environmental Regulation gives notice of its intent to issue permits to the City of St. Cloud for the replacement of two existing diesel generators with two identical generators (units #1 and #3) at the City of St. Cloud Municipal Power Plant in Osceola County, Florida. A determination of Best Available Control Technology (BACT) was not required.

A person who is substantially affected by the Department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes, and Chapters 17-1 and 28-5, Florida Administrative Code. The request for hearing must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

The applications, technical evaluation and department intent are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

DER Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32301

DER St. Johns River District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Comments on this action shall be submitted in writing to Bill Thomas of Tallahassee office within thirty (30) days of this notice.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

(1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners;

(c) All disputed issues of material fact. If there are none, the petition must so indicate;

(d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;

(e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;

(f) A demand for the relief to which the petitioner deems himself entitled; and

(g) Such other information which the petitioner contends is material.

I. SYNOPSIS OF APPLICATION

A. Name and Address of Applicant

City of St. Cloud
1309 9th Street
St. Cloud, Florida 32769

B. Source Location

The proposed source is located at 1718 10th Street, in the City of St. Cloud, Osceola County, Florida. The UTM coordinates are 407 km E and 1,423 km N.

C. Project Description

The applicant proposes to replace two existing diesel generators (unit #1 and #3) for two identical generators, also identified as unit #1 and unit #3.

Existing unit #1 (Superior Type VDSS, Serial No. unknown, 360 RPM, 1,440 HP., 1000 Kw, Fired with #2 Diesel Oil) will be replaced by a new unit #1, (Diesel Generator Fairbanks Morse, Opposed Piston Type 38 TDDS, Serial No. 970102, 720 RPM, 2,880 BHP, 2,050 Kw, Fired with natural gas and #2 Diesel oil).

Existing unit #3, (Diesel Generator Superior Type VDSS, Serial No. 12,718, 360 RPM, 1440 HP., 1000 Kw, Fired with #2 Diesel oil) will be replaced by a new unit #3 (Diesel Generator, Fairbanks Morse Opposed Piston Type 38 TDD 8, Serial No. 970113, 720 RPM, 2,880 BHP, 2,050 Kw, Fired with natural gas and #2 Diesel oil).

The applicant expects to maintain emission limits under the PSD significant levels by limiting the operating time of the two generators. Emission estimates are based on an operating time limit of 2190 hours per year. The new generators will be fired with natural gas and No. 2 fuel oil (95% and 5% of the time respectively).

II. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapters 17-2 Florida Administrative Code. Specifically, the proposed project involves two minor stationary sources, 17-2.100 (100), FAC, located in an area currently designated as attainment in accordance with section 17-2.420, FAC for all criteria pollutants.

The proposed project will be a minor modification for particulate matter (PM) nitrogen oxides (NOx), hydrocarbons (VOC), and carbon monoxide (CO). Emissions of PM, NOx, VOC, and

CO, are below the de minimus levels set in the PSD regulations. Therefore, the proposed project is exempt from provisions of Section 17-2.500 FAC, Prevention of Significant Deterioration.

The proposed project shall be permitted under section 17-2.520 FAC, Sources not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

III. SOURCE IMPACT ANALYSIS

A. Emissions Limitations

The operation of the two diesel engines, will produce emissions of particulate matter (PM), sulfur dioxide (SO_2), nitrogen oxides (NOx), carbon monoxide (CO) and volatile organic compounds (VOC).

Table 1 summarizes potential to emit of all pollutants regulated under the Act which are affected by the proposed sources. As the table shows, an emission increase is expected for PM, CO, NOx and VOC due to the replacement of the existing engines. These emission increases are under the PSD significant emission levels.

Although minimal, the new emission increases will be credited towards a significant increase.

The emission limiting standards selected as permitted emissions, which were made a condition of the permit are listed in Table 2.

B. Air Quality Impact

No ambient monitoring or modeling is required to provide reasonable assurance that ambient air standard will not be violated.

IV. CONCLUSIONS

Based on review of the data submitted by the City of St. Cloud for the installation of the two diesel engine generators, the FDER concludes that compliance with all applicable state air quality regulations will be achieved provided certain specific conditions are met.

The impact of the emission from the two generators, will not cause or contribute to a violation of any ambient air quality standard.

TABLE 1

SUMMARY OF EMISSIONS
(tons per year)

SOURCE	Pollutant				
	PM	SO_2	CO	NOx	HC
(1) Existing					
Unit #1	0.014	2.66	2.83	18.9	0.81
Unit #3	0.014	2.66	2.83	18.9	0.81
Total (A)	0.028	5.32	5.66	37.8	1.62
(2) Proposed					
Unit #1	0.7	0.56	11.1	34.8	2.78
Unit #3	0.7	0.56	11.1	34.8	2.78
Total (B)	1.4	1.12	22.2	69.6	5.56
Net Increase or Decrease (B-A)	1.37	-4.23	16.34	31.8	3.94
(3) PSD Significance Level	25	40	100	40	40

(1) Permitted emission limits
(2) Applicant's estimate of emission rate increases that will result from replacing the existing units for two new units. These new engines will operate 2190 hours per year.
(3) 40 CFR 52.21

TABLE 2

ALLOWABLE EMISSIONS
(pounds per hour)

SOURCE	POLLUTANT				
	PM	SO_2	CO	NOx	HC
Unit #1	0.63	0.51	10.2	31.7	2.54
Unit #2	0.63	0.51	10.2	31.7	2.54

Allowable emissions as estimated by the applicant.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

Permit Number: AC 49-61237
Expiration Date: September 30, 1983
County: Osceola
Latitude/Longitude: 28° 14' 41"N/
81° 17' 17"W
Project: 2,880 BHP
Diesel Generator (Unit #3)

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the installation of a 2,880 BHP diesel generator (unit #3), to be located at the City of St. Cloud Municipal Power Plant in Osceloa County, Florida.

The construction shall be in accordance with the attached permit application, plans and documents except as otherwise noted on pages 5, 6 and 7, "Specific Conditions".

Attachment:
Application to Construct Air Pollution Sources, DER Form 17-1.122(16), received on March 17, 1983.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

4. The fuel used to fire this engine shall be natural gas and #2 fuel oil with a 0.4 percent sulfur content (fuel oil shall not be used over 5% of the time).

5. Before this construction permit expires, the gas engine will be tested for sulfur dioxide, visible emissions and nitrogen oxides. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference methods in Chapter 17-2, FAC.

a. Compliance with the opacity limitation will be determined by reference method 9.

b. Compliance with the NO_x emission limit shall be determined by reference method 7 if visible emissions exceed 5% opacity.

c. Compliance with the sulfur dioxide emission limits will be determined by method 6 or by calculations based on fuel analysis (ASTM D1072-70 or D2880-71) for sulfur content.

The Department will be notified 30 days in advance of the compliance test. The test will be conducted at permitted capacity $\pm$ 10%.

6. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the applicant.

7. The applicant shall report any delays in construction and completion of this unit to the Department's St. Johns River District office.

8. The applicant will demonstrate compliance with the conditions of the construction permit, and submit a complete application for an operating permit to the Department's St. Johns River District office prior to 90 days of the expiration date of the construction permit. The applicant may continue to operate in compliance with all terms of the construction permit until its expiration date or issuance of an operating permit.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61237
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

9. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.

10. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700, FAC.

11. This permit replaces operating permit No. AO 49-4553. The applicant shall return this operating permit to the St. Johns River District office within three(3) months of start-up of the unit.

12. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this ___ day of_____, 1983

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

Permit Number: AC 49-61239
Expiration Date: September 30, 1983
County: Osceola
Latitude/Longitude: 28° 14' 41"N/
81° 17' 17"W
Project: 2,880 BHP
Diesel Generator (Unit #1)

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the installation of a 2,880 BHP diesel generator (unit #1), to be located at the City of St. Cloud Municipal Power Plant in Osceloa County, Florida.

The construction shall be in accordance with the attached permit application, plans and documents except as otherwise noted on pages 5, 6 and 7 "Specific Conditions".

Attachment:
Application to Construct Air Pollution Sources, DER Form 17-1.122(16), received on March 17, 1983.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The new source shall be constructed in accordance with the capacities and specifications stated in the application.

2. The maximum emission rates for the gas engine shall not exceed the following emission limits in pounds per hour.

Opacity	PM	SO_2	CO	NOx	HC
5%	0.63	0.51	10.2	31.7	2.54

3. This unit shall be allowed to operate 2190 hours per year.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

4. The fuel used to fire this engine shall be natural gas and #2 fuel oil with a 0.4 percent sulfur content (fuel oil shall not be used over 5% of the time).

5. Before this construction permit expires, the gas engine will be tested for sulfur dioxide, visible emissions and nitrogen oxides. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference methods in Chapter 17-2, FAC.

a. Compliance with the opacity limitation will be determined by reference method 9.

b. Compliance with the NO_x emission limit shall be determined by reference method 7 if visible emissions exceed 5% opacity.

c. Compliance with the sulfur dioxide emission limits will be determined by method 6 or by calculations based on fuel analysis (ASTM D1072-70 or D2880-71) for sulfur content.

The Department will be notified 30 days in advance of the compliance test. The test will be conducted at permitted capacity $\pm$ 10%.

6. Reasonable precautions to prevent fugitive particulate emissions during construction such as coating or spraying roads and construction sites used by contractors will be taken by the applicant.

7. The applicant shall report any delays in construction and completion of this unit to the Department's St. Johns River District office.

8. The applicant will demonstrate compliance with the conditions of the construction permit, and submit a complete application for an operating permit to the Department's St. Johns River District office prior to 90 days of the expiration date of the construction permit. The applicant may continue to operate in compliance with all terms of the construction permit until its expiration date or issuance of an operating permit.

PERMITTEE:
City of St. Cloud
1309 9th Street
St. Cloud, FL 32769

I. D. Number:
Permit Number: AC 49-61239
Expiration Date:September 30, 1983

SPECIFIC CONDITIONS:

9. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.

10. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700, FAC.

11. This permit replaces current operating permit. The applicant shall return this operating permit to the St. Johns River District office within three(3) months of start-up of the unit.

12. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this ___ day of_____, 1983

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

_____
VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

CITY OF ST. CLOUD, FLORIDA

1300 NINTH STREET • ST. CLOUD, FLORIDA 32769

PHONE:
(305) 892-2161

March 15, 1983

Mr. C.H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

DER
MAR 17 1983
BAQM

REFERENCE: AIR CONSTRUCTION PERMIT
APPLICATION AC49-61239
AND AC40-61237

Dear Mr. Fancy:

In accordance with your November 4, 1982 letter, we are transmitting herewith, additional information as noted in your letter. Although, these permit requests were deemed construction permits, they are in actuality operating permits. Unit #1 and Unit #3 are existing in our power generating plant and have been in operation many many years. Unit #3 was permitted December 12, 1977. This permit was permit AO-49-4553 (copy attached). This permit expired on December 12, 1982. We are having difficulty finding a copy of the permit for Unit #1. In discussing with our personnel, who were employed approximately at that time the permit was issued they indicate that an operating permit was also obtained from the Department. We are attaching their affidavit's as to the same. However, in accordance with your request please find the following:

1. Amended application for both Unit #1 and Unit #3.

2. Copy of the existing operating permit; permit #AO-49-4553.

3. Evidence that a $300 check was delivered to the Orlando office for each of the original permits. Attached, herewith, are copies of page 1 showing the paid receipt for the $300. Also a copy of our check submitted to the Department of Environmental Regulation in the amount of $600.

Should you have any further questions, concerning this, please do not hesitate to contact us.

Yours very truly,

Roxy S. Howse, P.E.
Public Works Director/City Engineer

RSH/kb
Attachment

cc: Mr. Charles Collins P.E./DER-Orlando
James V. Chisholm, City Manager

BEST AVAILABLE COPY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

UNIT #3

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: DIESEL ENGINE GENERATOR [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: CITY OF ST. CLOUD MUNICIPAL POWER PLANT COUNTY: OCEOLA

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) DIESEL ENGINE GENERATOR, DUEL FUEL, #2 DIESEL FUEL AND NATURAL GAS FIRED

SOURCE LOCATION: Street 1718 10th STREET City ST. CLOUD

UTM: East 407,000 North 1,423,000

Latitude 28 ° 14 ' 41 "N Longitude 81 ° 17 ' 17 "W

APPLICANT NAME AND TITLE: CITY OF ST. CLOUD

APPLICANT ADDRESS: 1300 9th STREET ST. CLOUD, FLORIDA 32769

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CITY OF ST. CLOUD

I certify that the statements made in this application for a INSTALLATION permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: James V. Chisholm

James V. Chisholm, City Manager
Name and Title (Please Type)

Date: 10/7/82 Telephone No. (305)892-2161

PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

(Affix Seal)

Signed:

Roxy S. Howse, P.E., Public Works Director/
Name (Please Type) City Engineer

CITY OF ST. CLOUD
Company Name (Please Type)

1300 Ninth Street, St. Cloud, Florida 32769
Mailing Address (Please Type)

Florida Registration No. 11958 Date: 10/7/82 Telephone No. (305)892-2161

[1] See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

BEST AVAILABLE COPY

300

UNIT #1

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: DIESEL ENGINE GENERATOR [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: CITY OF ST. CLOUD MUMICIPAL POWER PLANT COUNTY: OCEOLA

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) DIESEL ENGINE GENERATOR, DUEL FUEL, #2 DIESEL FUEL AND NATURAL GAS FIRED

SOURCE LOCATION: Street 1718 10th STREET City ST. CLOUD

UTM: East 407,000 North 1,423,000

Latitude 28, o 14 ' 41 "N Longitude 81 o 17 ' 17 "W

APPLICANT NAME AND TITLE: CITY OF ST. CLOUD

APPLICANT ADDRESS: 1300 9th STREET, ST. CLOUD FLORIDA, 32769

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CITY OF ST. CLOUD

I certify that the statements made in this application for a INSTALLATION permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: James V. Chisholm

James V. Chisholm, City Manager
Name and Title (Please Type)

Date: 10/7/82 Telephone No. (305) 892-2161

PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

(Affix Seal)

Signed: Roxy S. Howse

Roxy S. Howse, P.E., Public Works Director/
Name (Please Type) City Engineer

CITY OF ST. CLOUD
Company Name (Please Type)

1300 Ninth Street, St. Cloud, Florida 32769
Mailing Address (Please Type)

Florida Registration No. 11958 Date: 10/7/82 Telephone No. (305) 892-2161

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATER MARK - HOLD TO LIGHT TO VIEW

BEST AVAILABLE COPY

SUN BANK OF ST. CLOUD
ST. CLOUD, FLORIDA

CITY OF ST. CLOUD

ST. CLOUD, FLORIDA 32769

No 010379
63-479
631

PAY

DATE	CHECK NO.	TO THE ORDER OF		AMT
10/7/82	10379	Dept. of Environmental Regulation	$ 600.00	600.00

NOT NEGOTIABLE

GENERAL
OPERATING

CITY OF ST. CLOUD - GENERAL OPERATING

10/7/82 Construction permits $600.00

Engine #1 and Engine #3 @$300.00 each

Dr. 020-923-000
Cr. 020-101-000

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED ABOVE
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT NECESSARY.

Ernest C. Somers Ralph H. Taylor
DEPARTMENT HEAD

APPROVED BY CITY MANAGER

AC 49-61237 PAGE (1)

DER

MAR 17 1983

BAQM

UNIT #3

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: CITY UTILITIES/GAS DIESEL [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [ ] Construction [X] Operation [ ] Modification

COMPANY NAME: CITY OF ST. CLOUD MUNICIPAL POWER PLANT COUNTY: OSCEOLA

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber, Peaking Unit No. 2, Gas Fired) DIESEL ENGINE GENERATOR, DUEL FUEL, #2 DIESEL FUEL AND NATURAL GAS FIRED

SOURCE LOCATION: Street 1718 10th Street City ST. CLOUD

UTM: East 407,000 North 1,423,000

Latitude 28 ° 14 ' 41 "N Longitude 81 ° 17 ' 17 "W

APPLICANT NAME AND TITLE: CITY OF ST. CLOUD

APPLICANT ADDRESS: 1300 9th STREET, ST. CLOUD, FLORIDA 32769

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CITY OF ST. CLOUD

I certify that the statements made in this application for a EXISTING permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: James V Chisholm

JAMES V. CHISHOLM, CITY MANAGER
Name and Title (Please Type)

Date: 3/7/83 Telephone No. (305) 892-2161

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

ROXY S. HOWSE, REGISTERED PROFESSIONAL ENGINEER, CERTIFICATE NO. 11958, STATE OF FLORIDA (Affix Seal)

Signed: Roxy S Howse

ROXY S. HOWSE, P.E., PUBLIC WORK DIR./CITY ENGINEER
Name (Please Type)

CITY OF ST. CLOUD
Company Name (Please Type)

1300 Ninth St., St. Cloud, Florida 32769
Mailing Address (Please Type)

Florida Registration No. 11958 Date: 3/ 7/83 Telephone No. (305) 892-2161

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Replacement of previously existing Unit #3 Diesel generator

(Please reference Exhibit Section 11, A-1)

Modification will be in full compliance.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction N/A Completion of Construction N/A

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

N/A

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Permit No. A0-49-4553 Issued Dec. 12, 1977

Expiration Dec. 12, 1982

Please reference Exhibit Section 11, D-1

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes X No

F. Normal equipment operating time: hrs/day 6 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr 2,190 ; if seasonal, describe:

G. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? NO
   a. If yes, has "offset" been applied?
   b. If yes, has "Lowest Achievable Emission Rate" been applied?
   c. If yes, list non-attainment pollutants.
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. NO
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. NO
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? NO
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? NO

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SEE ATTACHMENT 2-G-1-A, B, C.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable: N/A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): N/A

2. Product Weight (lbs/hr): N/A

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Nitrogen oxides	31.7	34.8	N/A	N/A	31.7	139.0	See
Particulate	0.63	0.7	N/A	N/A	0.63	2.78	Attachment
Sulfur Dioxide	0.51	0.56	N/A	N/A	0.51	2.22	V-6
Carbon Monoxide	10.16	11.1	N/A	N/A	10.16	44.5	
Hydrocarbons	2.54	2.78	N/A	N/A	2.54	11.1	

D. Control Devices: (See Section V, Item 4) N/A

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5]

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard

[4] Emission, if source operated without control (See Section V, Item 3)

[5] If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas (ft^3)	17,600	17,600	18.05
No. 2 Fuel Oil (gallons)	8.2	8.2	1.15

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis: Natural Gas/Pilot Fuel Oil

Percent Sulfur: Natural Gas:0% #2 Diesel Fuel 0.4% Percent Ash: Ng/Ng

Density: #2 Fuel Oil 7.132 lbs/gal Typical Percent Nitrogen: Ng/0.2

Heat Capacity: Natural Gas: 1026 BTU/ft^3 BTU/lb 140,000 BTU/gal
#2 Diesel Oil: 19,430

Other Fuel Contaminants (which may cause air pollution): None

F. If applicable, indicate the percent of fuel used for space heating. Annual Average N/A Maximum N/A

G. Indicate liquid or solid wastes generated and method of disposal.
All liquids and solid wastes will be disposed of in either a sanitary sewage system or sanitary landfill.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 50.69 ft. Stack Diameter: 20 inches ft.

Gas Flow Rate: 8,064 ACFM Gas Exit Temperature: 400 - 800 °F.

Water Vapor Content: Nil % Velocity: 150 FPS

SECTION IV: INCINERATOR INFORMATION

N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste

Total Weight Incinerated (lbs/hr) Design Capacity (lbs/hr)

Approximate Number of Hours of Operation per day days/week

Manufacturer

Date Constructed Model No.

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner [ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICABLE

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made. SEE ATTACHMENT V-2-1

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). SEE ATTACHMENT V-2-1

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.). NOT APPLICABLE

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency). NOT APPLICABLE

6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. SEE ATTACHMENT V-6

7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map). SEE ATTACHMENT V-7

8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. SEE ATTACHMENT V-8

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
[ ] Yes [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [X] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology? N/A

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any). N/A

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1. N/A

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy*: h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency*:

3. Capital Cost:

4. Life:

5. Operating Cost:

6. Energy:

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data N/A

1. _____ no sites _____ TSP _____( )SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

The installation of this unit will improve the reliability of the community electrical system without significant social, economic, or enviornmental impacts.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

ATTACHMENT 2 A - 1

Old Unit #3 Diesel Generator (previously removed)
Superior Type VDSS, Serial No. 12,178, 360 RPM, 1440 H.P.,
1,000 KW, Fired with #2 Diesel Oil.

New Unti #3 Diesel Generator, Fairbanks Morse
Opposed Piston Type 38TDD8, Serial No. 970113, 720 RPM,
2,880 BHP, 2,050 KW, Fired with 5% #2 Diesel
Oil and 95% Natural Gas.

EXHIBIT SECTION II D-1 SERIAL Nº 04793

10-3320-048-0002-03

26.1EA
Class A
(Major)

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

OPERATION PERMIT

City of St. Cloud
FOR Municipal Power Plant
1300 Ninth Street
St. Cloud, Florida 32769

PERMIT NO. AO-49-4553 DATE OF ISSUE December 12, 1977

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403 FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:

Walter V. Dantzler, City Manager

FOR THE OPERATION OF THE FOLLOWING: Unit #3 Peaking Diesel Generator Type VDSS, Serial No. 12178, Generator, Electric Machinery Mfg. Co. Serial No. 97453, Burning #2 Oil only, 80.2 Gal./Hr. Max., 11.318 Million BTU/Hr. Max. Heat Input, Subject to the attached conditions of approval, Numbers 1,2,3,4,5,6,7,8,11,12,13,14 & 16

LOCATED AT: 1700 Tenth St., St. Cloud, Osceola County
UTM Zone 17 East 471,880 meters; North 3,124,930 meters.

IN ACCORDANCE WITH THE APPLICATION DATED 11/17/76 (Rec'd. 8/23/77) and subsequent information received 10/4/77.

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN. FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL December 12, 1982 OR UNLESS REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

DISTRICT ENGINEER
Karl Pulvermuller for
Alfred Mueller, Jr.
BRANCH OFFICE MANAGER

JOSEPH W. LANDERS, JR.
SECRETARY
DISTRICT MANAGER

GH

ENGINE #1 Previously removed Engine

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	.027	.014	N/A	N/A	.027	.118	
NO_2	36.3	18.9	N/A	N/A	36.3	160.3	
HC	1.55	0.81	N/A	N/A	1.55	6.78	
CO	5.44	2.83	N/A	N/A	5.44	23.8	
SO_2	5.12	2.66	N/A	N/A	5.12	22.4	

ENGINE #3 Previously removed Engine

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	.027	.014	N/A	N/A	.027	.118	
NO_2	36.3	18.9	N/A	N/A	36.3	160.3	
HC	1.55	0.81	N/A	N/A	1.55	6.78	
CO	5.44	2.83	N/A	N/A	5.44	23.8	
SO_2	5.12	2.66	N/A	N/A	5.12	22.4	

Air Contaminants Summary: (tons per year)

SOURCE	Part.	SO_2	CO	NO_x	HC
ENGINE #1	.014	2.66	2.83	18.9	0.81
ENGINE #3	.014	2.66	2.83	18.9	0.81
TOTAL:	.028	5.32	5.66	37.8	1.62

ENGINE #1 New Replacement

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	0.63	0.7	N/A	N/A	0.63	2.78	
NO_2	31.7	34.8	N/A	N/A	31.7	139.0	
HC	2.54	2.78	N/A	N/A	2.54	11.1	
CO	10.2	11.1	N/A	N/A	10.2	44.5	
SO_2	0.51	0.56	N/A	N/A	0.51	2.22	

ENGINE #3 New Replacement

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	0.63	0.7	N/A	N/A	0.63	2.78	
NO_2	31.7	34.8	N/A	N/A	31.7	139.0	
HC	2.54	2.78	N/A	N/A	2.54	11.1	
CO	10.2	11.1	N/A	N/A	10.2	44.5	
SO_2	0.51	0.56	N/A	N/A	0.51	2.22	

Air Contaminants Summary: (tons per year)

SOURCE	Part.	SO_2	CO	NO_x	HC
ENGINE #1	0.70	0.56	11.1	34.8	2.78
ENGINE #3	0.70	0.56	11.1	34.8	2.78
TOTAL:	1.40	5.56	22.2	69.6	1.12

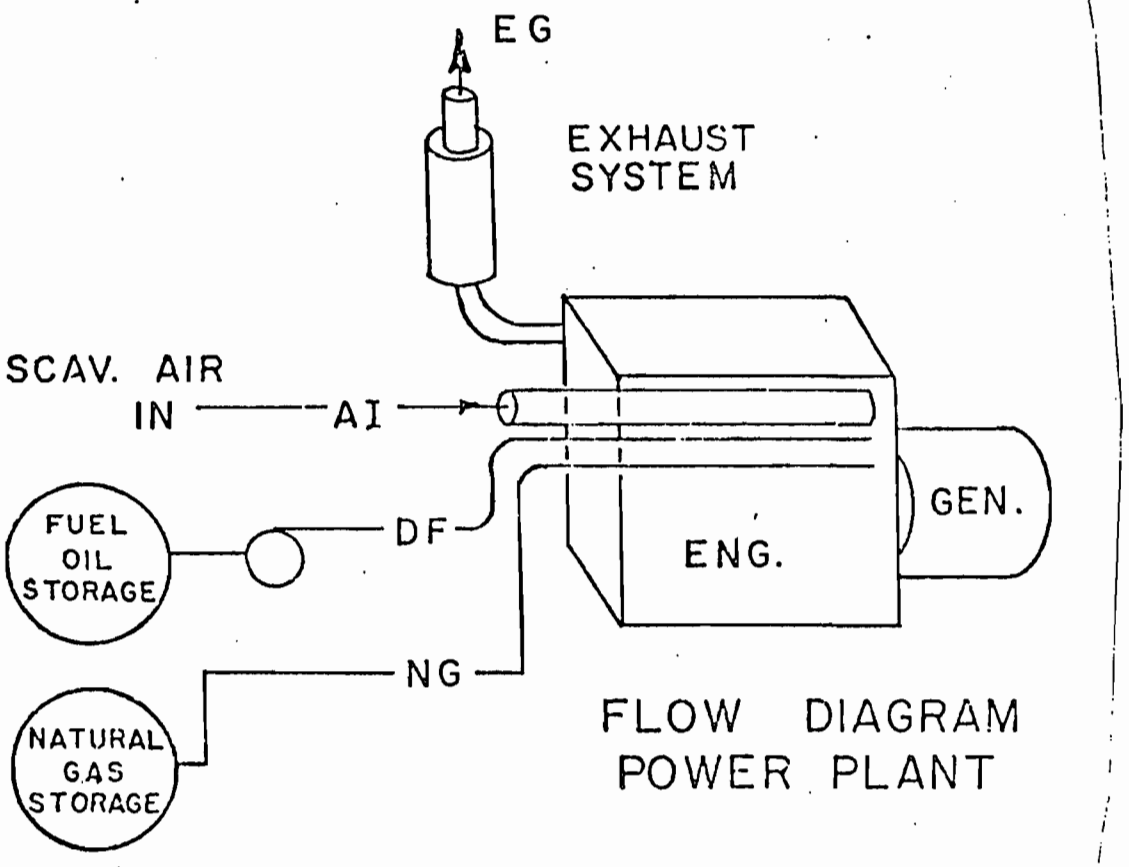
EMISSION COMPUTATIONS

Previously removed Engine	Part.	SO2	CO	NO_x	HC
#1 and #3	.028	5.32	5.66	37.8	1.62

New replacement Engine	Part.	SO2	CO	NO_x	HC
#1 and #3	1.40	5.56	22.2	69.6	1.12

Total increase of emission (in tons)	1.37	0.24	16.5	31.8	0.0

ATTACHMENT 2-G-1-C

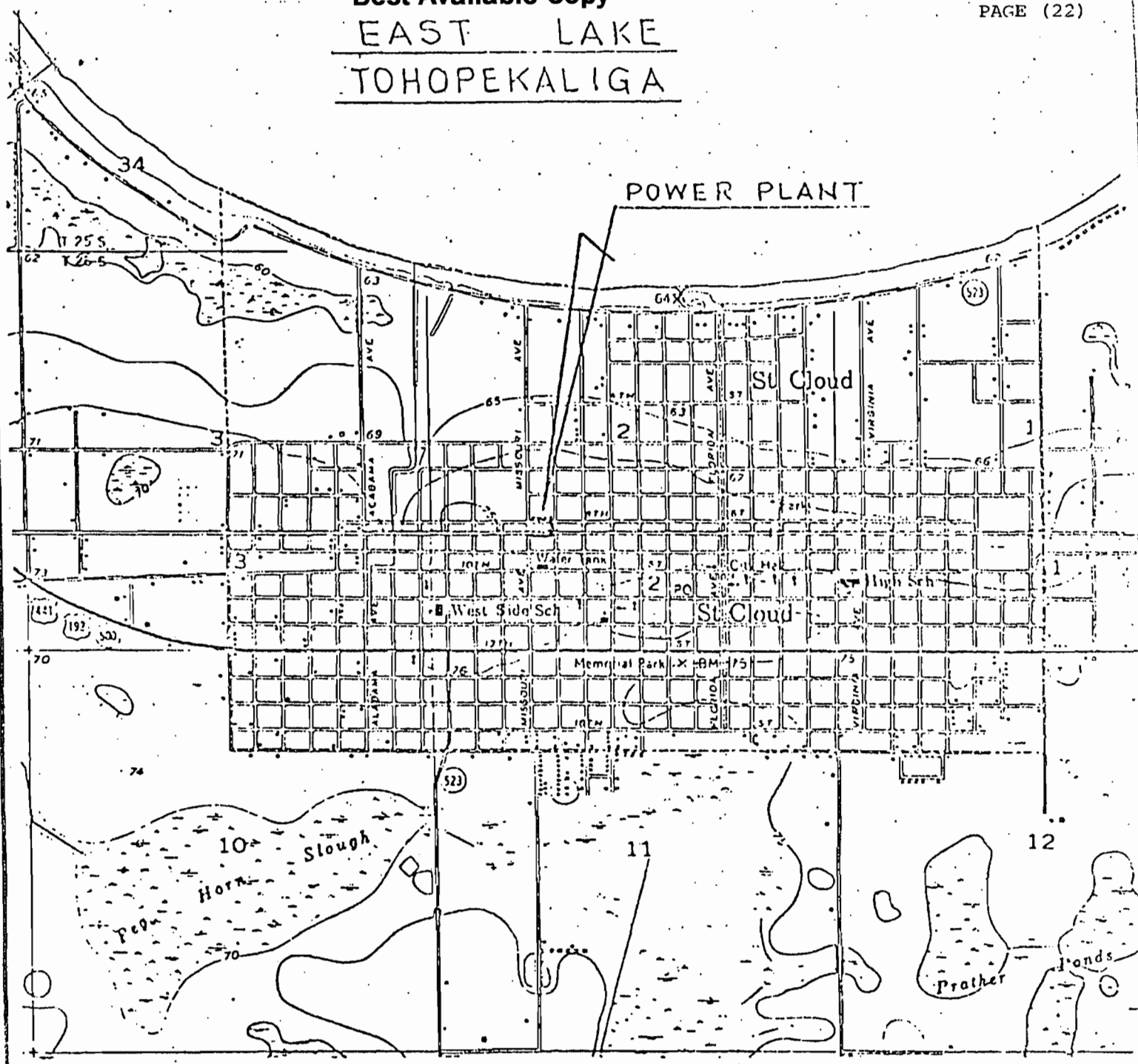


TYPICAL FOR DUAL FUEL UNITS

DRAWING NUMBER TWO

ATTACHMENT V-6

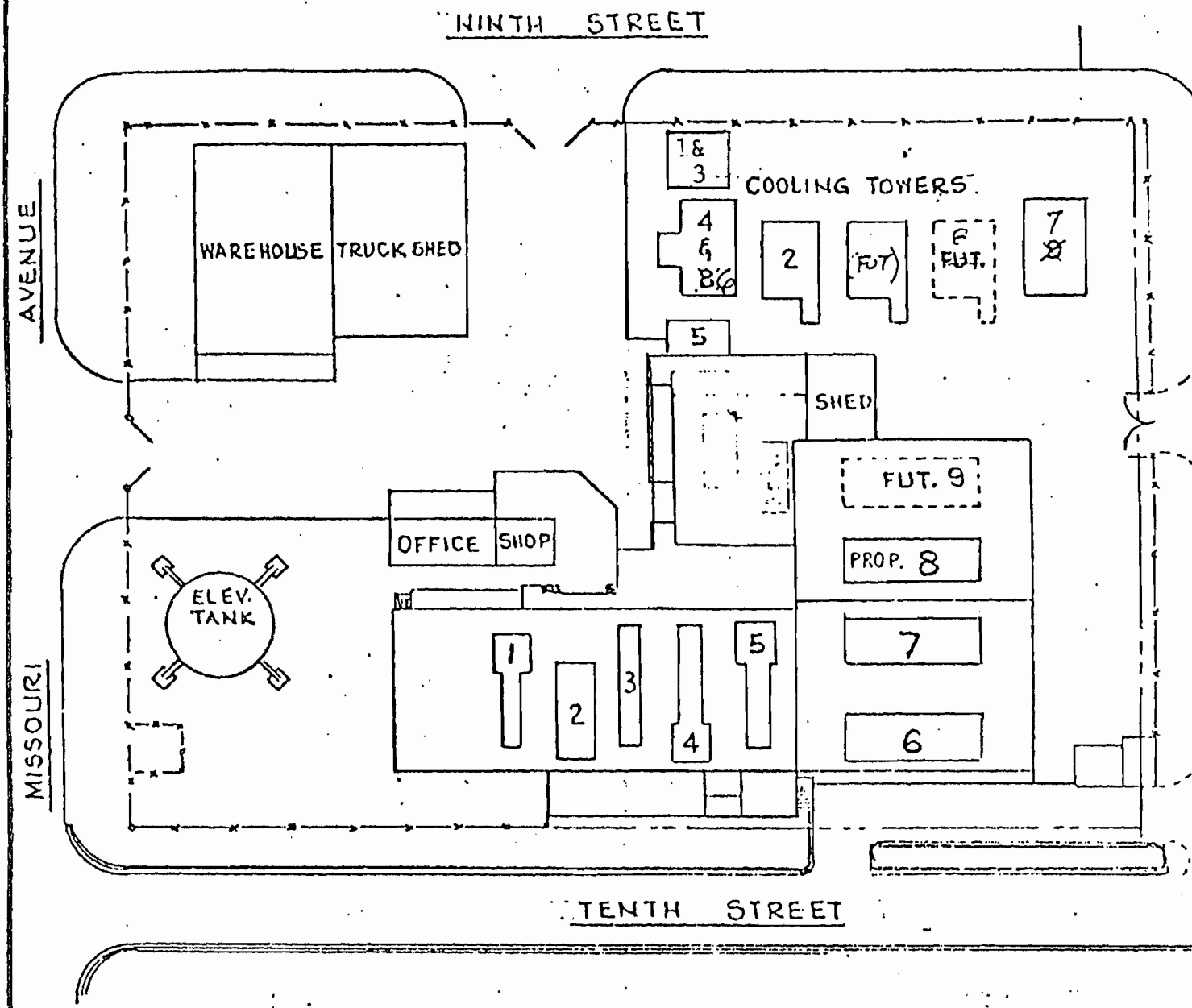
EAST LAKE TOHOPEKALIGA



PLOT PLAN
POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 7

ATTACHMENT V-7



POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 8

ATTACHMENT V-8

AC 49-61239 PAGE (1)

DER

MAR 17 1983

UNIT #1

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

BAQM APPLICATION TO OPERATE/CONSTRUCT
AIR POLLUTION SOURCES

SOURCE TYPE: CITY UTILITIES/GAS DIESEL [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [ ] Construction [X] Operation [ ] Modification

COMPANY NAME: CITY OF ST. CLOUD MUNICIPAL POWER PLANT COUNTY: OSCEOLA

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) DIESEL ENGINE GENERATOR, DUEL FUEL, #2 DIESEL FUEL AND NATURAL GAS FIRED

SOURCE LOCATION: Street 1718 10TH STREET City ST. CLOUD

UTM: East 407,000 North 1,423,000

Latitude 28 o 14 ' 41 "N Longitude 81 o 17 ' 17 "W

APPLICANT NAME AND TITLE: CITY OF ST. CLOUD

APPLICANT ADDRESS: 1300 9th STREET ST. CLOUD, FLORIDA 32769

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CITY OF ST. CLOUD

I certify that the statements made in this application for a EXISTING permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: James V. Chisholm

JAMES V. CHISHOLM, CITY MANAGER
Name and Title (Please Type)

Date: 3/7/83 Telephone No. (305) 892-2161

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

ROXY S. HOWSE REGISTERED PROFESSIONAL ENGINEER CERTIFICATE NO. 11958 STATE OF FLORIDA (Affix Seal)

Signed: Roxy S. Howse

ROXY S. HOWSE, P.E., PUBLIC WORKS DIRECTOR/
Name (Please Type) CITY ENGINEER

CITY OF ST. CLOUD
Company Name (Please Type)

1300 NINTH STREET, ST. CLOUD, FLORIDA 32769
Mailing Address (Please Type)

Florida Registration No. 11958 Date: 3/7/83 Telephone No. (305) 892-2161

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

REPLACEMENT OF EXISTING UNIT #1, DIESEL GENERATOR (PLEASE REFERENCE EXHIBIT SECTION II-A-1-A) UNIT # 1 IS IDENTICAL TO UNIT #3, PERMIT CANNOT BE LOCATED MODIFICATION WILL BE IN FULL COMPLIANCE.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction N/A Completion of Construction N/A

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

N/A

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

PERMIT NUMBER UNKNOWN ISSUED DECEMBER, 1972 ?

EXPIRATION DECEMBER, 1977

PLEASE REFERENCE SECTION II-A-1

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes X No

F. Normal equipment operating time: hrs/day 6 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr 2190 ; if seasonal, describe: ____

G. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? NO
   a. If yes, has "offset" been applied? ____
   b. If yes, has "Lowest Achievable Emission Rate" been applied? ____
   c. If yes, list non-attainment pollutants. ____
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. NO
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII. NO
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? NO
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? NO

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SEE ATTACHMENT II-G-1-A,B,C,

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable: N/A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1) N/A

1. Total Process Input Rate (lbs/hr): _____

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
NITROGEN OXIDE	31.7	34.8	N/A	N/A	31.7	139.0	SEE
PARTICULATE	0.63	0.7	N/A	N/A	0.63	2.78	ATTACHMENT
SULFUR DIOXIDE	0.51	0.56	N/A	N/A	0.51	2.22	V-6
CARBON MONOXIDE	10.16	11.1	N/A	N/A	10.16	44.5	
HYDROCARBONS	2.54	2.78	N/A	N/A	2.54	11.1	

D. Control Devices: (See Section V, Item 4) N/A

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5]

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard

[4] Emission, if source operated without control (See Section V, Item 3)

[5] If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
NATURAL GAS (FT 3)	17,600	17,600	18.05
NO2 FUEL OIL (GALLONS)	8.2	8.2	1.15

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis: NATURAL GAS/PILOT FUEL OIL

Percent Sulfur: NATURAL GAS: 0% #2 DIESEL FUEL 0.4% Percent Ash: NG/NG

Density: #2 FUEL OIL 7.132 lbs/gal Typical Percent Nitrogen: NG/0.2

Heat Capacity: NATURAL GAS 1026 BTU/FT2
#2 DIESEL OIL 19.430 BTU/lb 140,000 BTU/gal

Other Fuel Contaminants (which may cause air pollution): NONE

F. If applicable, indicate the percent of fuel used for space heating. Annual Average N/A Maximum N/A

G. Indicate liquid or solid wastes generated and method of disposal.

ALL LIQUIDS AND SOLID WASTES WILL BE DISPOSED OF IN EITHER A SANITARY SEWAGE SYSTEM OR SANITARY LANDFILL.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 50.69 ft. Stack Diameter: 20 INCHES ft.

Gas Flow Rate: 8.064 ACFM Gas Exit Temperature: 400-800 °F.

Water Vapor Content: NIL % Velocity: 150 FPS

SECTION IV: INCINERATOR INFORMATION

N/A

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste

Total Weight Incinerated (lbs/hr) Design Capacity (lbs/hr)

Approximate Number of Hours of Operation per day days/week

Manufacturer

Date Constructed Model No.

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner [ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation. NOT APPLICAPLE

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). SEE ATTACHMENT V-2-1

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.). N/A

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency). N/A

6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. SEE ATTACHMENT V-6

7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map). SEE ATTACHMENT V-7

8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. SEE ATTACHMENT V-8

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
[ ] Yes [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [X] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology? N/A

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any). N/A

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1. N/A

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy*: h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency*:

3. Capital Cost:

4. Life:

5. Operating Cost:

6. Energy:

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data N/A

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? _____ Yes _____ No

b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

THE INSTALLATION OF THIS UNIT WILL IMPROVE THE RELIABILITY OF THE COMMUNITY ELECTRICAL SYSTEM WITHOUT SIGNIFICANT SOCIAL, ECONOMICAL, OR ENVIRONMENTAL IMPACTS.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

ATTACHMENT 2A -1A

Old Unit #1 Diesel Generator (previously removed) Superior Type VDSS, Serial No. - Unknown, 360 RPM, 1,440 H.P., 1,000 KW, Fired with #2 Diesel Oil.

New Unit #1, Diesel Generator Fairbanks Morse, Opposed Piston Type 38TDDS, Serial No. 970102, 720 RPM, 2,880 BHP, 2,050 KW, Fired with 5% #2 Diesel Fuel and 95% Natural Gas.

A F F I D A V I T

STATE OF FLORIDA)
COUNTY OF OSCEOLA)

BEFORE ME, the undersigned Notary Public, personally appeared Ralph W. Taylor, who, first being duly sworn, deposes and says as follows:

1. Affiant's name is Ralph W. Taylor and he resides at 431 Michigan Ave, St. Cloud, Florida 32769.

2. Affiant is presently employed be the City of St. Cloud in the position of Power Production Supervisor and has been employed by the City of St. Cloud since December 29 1975.

3. Affiant states that he has knowledge and familiarity with that certain Diesel-Generator, heretofore referred to by the City as Unit No. 1, the same being a Superior Type VDSS, 1440 H.P., 360 RPM. 1,000 KW Diesel-Generator.

4. Affiant states of his own knowledge that such Unit has not been in service since 1976 and was physically removed from building in the year 1979. Having been in service not less than twenty years.

FURTHER, AFFIANT SAYETH NOT!

Ralph W Taylor
(Affiant)

SWORN TO AND SUBSCRIBED before me this 7th day of March, 1983.

Sharon A Stroup (SEAL)
NOTARY PUBLIC - State of FL
My Comm. expires:

Notary Public State of Florida at Large
My Commission Expires Jan. 29, 1985
BONDED by AMERICAN FIRE & CASUALTY

A F F I D A V I T

STATE OF FLORIDA)
COUNTY OF OSCEOLA)

BEFORE ME, the undersigned Notary Public, personally appeared Ralph R. Fisk, who, first being duly sworn, deposes and says as follows:

1. Affiant's name is Ralph R. Fisk and he resides at 1620 Ill. Ave St. Cloud Fla. 32769.

2. Affiant is presently employed be the City of St. Cloud in the position of Maint. Supt. and has been employed by the City of St. Cloud since Jan. 1974.

3. Affiant states that he has knowledge and familiarity with that certain Diesel-Generator, heretofore referred to by the City as Unit No. 1, the same being a Superior Type VDSS, 1440 H.P., 360 RPM. 1,000 KW Diesel-Generator.

4. Affiant states of his own knowledge that such Unit has not been in service since 1976 and was physically removed from building in the year 1979. Having been in service not less than twenty years.

FURTHER, AFFIANT SAYETH NOT!

Ralph R. Fisk
(Affiant)

SWORN TO AND SUBSCRIBED before me this 7th day of March, 1983.

Sharon A Stroup (SEAL)
NOTARY PUBLIC - State of FL
My Comm. expires: Notary Public State of Florida at Large
My Commission Expires Jan. 29, 1985
BONDED by AMERICAN FIRE & CASUALTY

A F F I D A V I T

STATE OF FLORIDA)
COUNTY OF OSCEOLA)

BEFORE ME, the undersigned Notary Public, personally appeared Bobby Holder, who, first being duly sworn, deposes and says as follows:

1. Affiant's name is Bobby Holder and he resides at 121 Fla Pkwy Kissimmee.

2. Affiant is presently employed be the City of St. Cloud in the position of Plant ORP and has been employed by the City of St. Cloud since 8-16 1972.

3. Affiant states that he has knowledge and familiarity with that certain Diesel-Generator, heretofore referred to by the City as Unit No. 1, the same being a Superior Type VDSS, 1440 H.P., 360 RPM. 1,000 KW Diesel-Generator.

4. Affiant states of his own knowledge that such Unit has not been in service since 1976 and was physically removed from building in the year 1979. Having been in service not less than twenty years.

FURTHER, AFFIANT SAYETH NOT!

Bobby Holder
(Affiant)

SWORN TO AND SUBSCRIBED before me this 7th day of March, 1983.

Sharon A Stroup (SEAL)
NOTARY PUBLIC - State of FL
My Comm. expires: Notary Public State of Florida at Large
My Commission Expires Jan. 29, 1985
BONDED by AMERICAN FIRE & CASUALTY

ENGINE #1 Previously removed Engine

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	.027	.014	N/A	N/A	.027	.118	
NO_2	36.3	18.9	N/A	N/A	36.3	160.3	
HC	1.55	0.81	N/A	N/A	1.55	6.78	
CO	5.44	2.83	N/A	N/A	5.44	23.8	
SO_2	5.12	2.66	N/A	N/A	5.12	22.4	

ENGINE #3 Previously removed Engine

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	.027	.014	N/A	N/A	.027	.118	
NO_2	36.3	18.9	N/A	N/A	36.3	160.3	
HC	1.55	0.81	N/A	N/A	1.55	6.78	
CO	5.44	2.83	N/A	N/A	5.44	23.8	
SO_2	5.12	2.66	N/A	N/A	5.12	22.4	

Air Contaminants Summary: (tons per year)

SOURCE	Part.	SO_2	CO	NO_x	HC
ENGINE #1	.014	2.66	2.83	18.9	0.81
ENGINE #3	.014	2.66	2.83	18.9	0.81
TOTAL:	.028	5.32	5.66	37.8	1.62

ENGINE #1 New Replacement

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	0.63	0.7	N/A	N/A	0.63	2.78	
NO_2	31.7	34.8	N/A	N/A	31.7	139.0	
HC	2.54	2.78	N/A	N/A	2.54	11.1	
CO	10.2	11.1	N/A	N/A	10.2	44.5	
SO_2	0.51	0.56	N/A	N/A	0.51	2.22	

ENGINE #3 New Replacement

C. Airborne Contaminants Emitted:

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Particulates	0.63	0.7	N/A	N/A	0.63	2.78	
NO_2	31.7	34.8	N/A	N/A	31.7	139.0	
HC	2.54	2.78	N/A	N/A	2.54	11.1	
CO	10.2	11.1	N/A	N/A	10.2	44.5	
SO_2	0.51	0.56	N/A	N/A	0.51	2.22	

Air Contaminants Summary: (tons per year)

SOURCE	Part.	SO_2	CO	NO_x	HC
ENGINE #1	0.70	0.56	11.1	34.8	2.78
ENGINE #3	0.70	0.56	11.1	34.8	2.78
TOTAL:	1.40	5.56	22.2	69.6	1.12

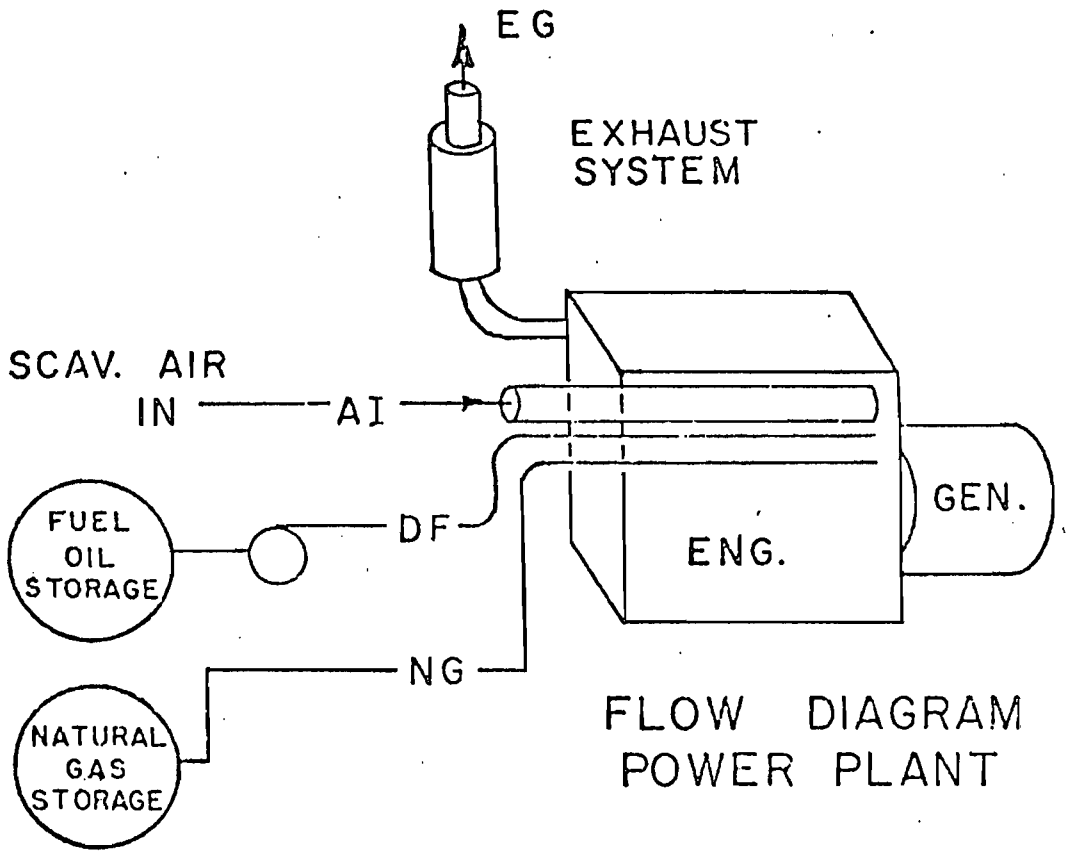
EMISSION COMPUTATIONS

Previously removed Engine	Part.	SO2	CO	NO_x	HC
#1 and #3	.028	5.32	5.66	37.8	1.62

New replacement Engine	Part.	SO2	CO	NO_x	HC
#1 and #3	1.40	5.56	22.2	69.6	1.12

Total increase of emission (in tons)	1.37	0.24	16.5	31.8	0.0

ATTACHMENT 2-G-1-C

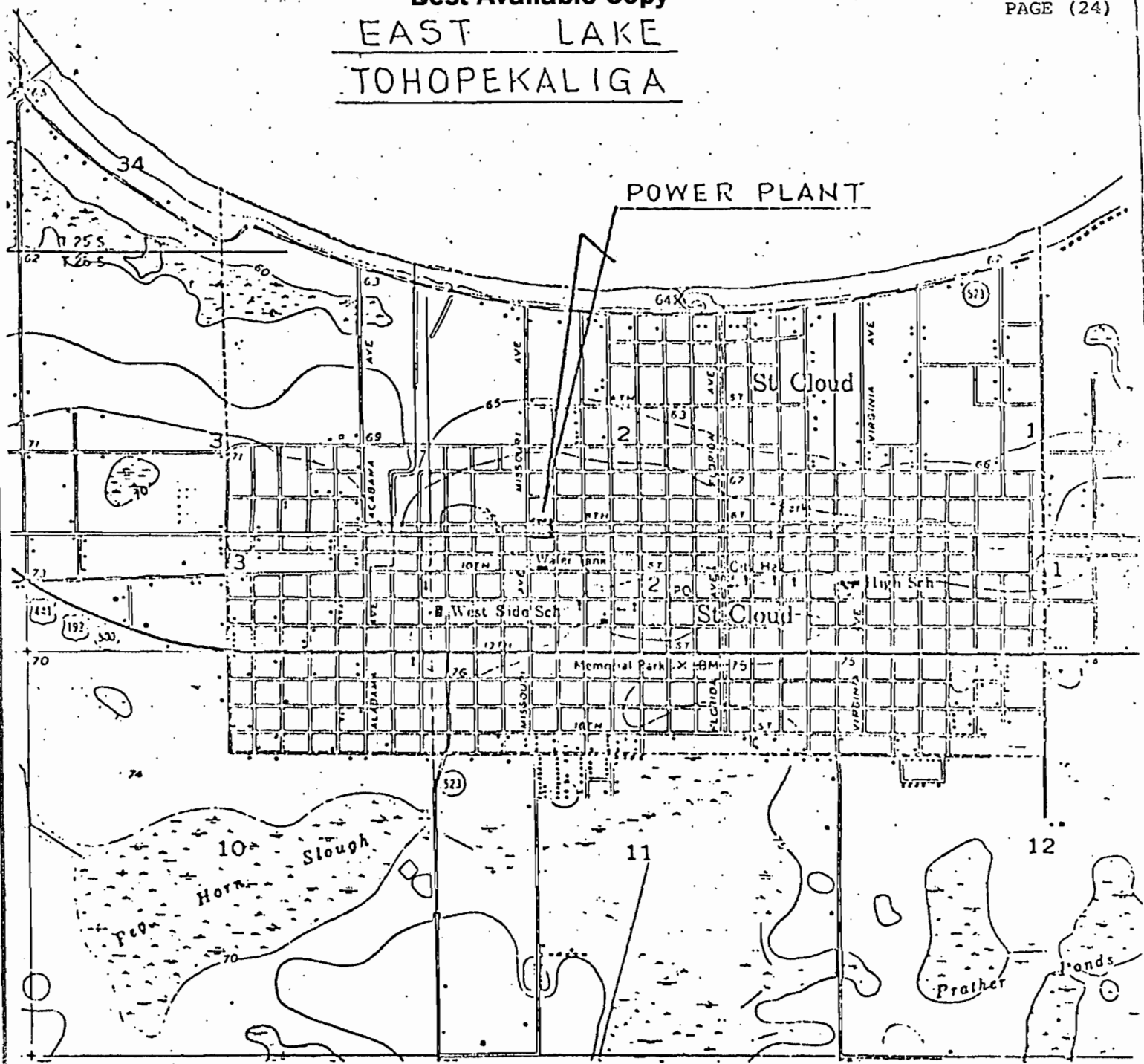


TYPICAL FOR DUAL FUEL UNITS

DRAWING NUMBER TWO

ATTACHMENT V-6

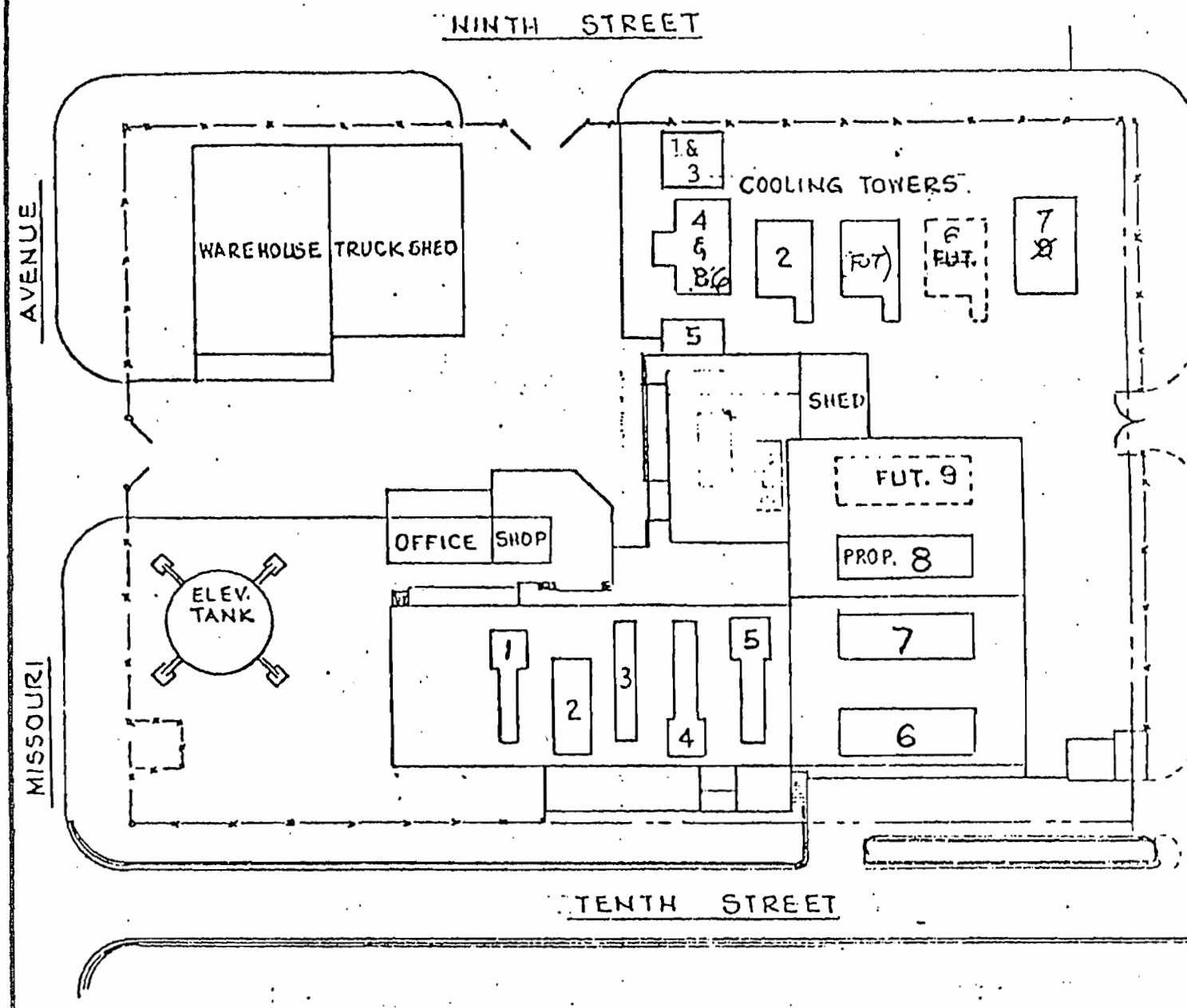
EAST LAKE TOHOPEKALIGA



PLOT PLAN
POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 7

ATTACHMENT V-7



POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 8

No. 0157762

RECEIPT FOR CERTIFIED MAIL

**NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL**

(See Reverse)

SENT TO
James B. Chisholm

STREET AND NO.
St. Cloud Power Plant

P.O., STATE AND ZIP CODE
St. Cloud, FL 32769

POSTAGE		$
CONSULT POSTMASTER FOR FEES — OPTIONAL SERVICES: CERTIFIED FEE		¢
SPECIAL DELIVERY		¢
RESTRICTED DELIVERY		¢
RETURN RECEIPT SERVICE: SHOW TO WHOM AND DATE DELIVERED		¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢
TOTAL POSTAGE AND FEES		$

POSTMARK OR DATE

11/5/82

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979

SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
   - [X] Show to whom and date delivered. ____¢
   - [ ] Show to whom, date and address of delivery. ____¢
   - [ ] RESTRICTED DELIVERY
     Show to whom and date delivered. ____¢
   - [ ] RESTRICTED DELIVERY.
     Show to whom, date, and address of delivery. $____

   (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
James B. Chisholm
City of St. Cloud Power Plant
St. Cloud, FL 32769

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0157762	

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE [ ] Addressee [ ] Authorized agent

L. McMichael

4. DATE OF DELIVERY
11/8/82

POSTMARK
ST CLOUD FLA NOV 8 1982

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆GPO: 1979-300-459

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 4, 1982

CERTIFIED MAIL

Mr. James B. Chisholm, City Manager
City of St. Cloud Municipal Power Plant
St. Cloud, Florida 32769

Dear Mr. Chisholm:

Re: Air Construction Permit Applications AC 49-61239
AC 49-61237

The Bureau of Air Quality Management has received your applications for permits to construct two natural gas/diesel engines at the City of St. Cloud Municipal Power Plant in Osceola County, Florida. Based on our initial review of your proposal it has been determined that additional information is needed before we can process the applications. The information required to complete the application is listed below:

Section I, B.

Please send a copy of Page 1 of the application with the Professional engineer's seal for our files.

Section III, C.

As per information received, the construction of the two diesel engine generators (Unit No.1 and Unit No.3) makes your facility subject to preconstruction review under state and federal Prevention of Significant Deterioration (PSD) regulations. This is considered a modification to a major facility subject to Chapter 17-2.500(2)(d)4, FAC.

The increase of NO_x emission is above the significance levels set in the PSD regulations.

Unit #1	27	tons per year
Unit #3	27	"
Total Increase	54	"
PSD Significance Level	40	"

Therefore, an application for a federal permit should be submitted to this office. Please refer to Chapter 17-2.500 FAC and 40 CFR 52.21, for the additional requirements that are needed to complete the application.

Section III, C. and Section V, 2.

Since natural gas/diesel engines are not covered in Chapter 17-2.600(6) FAC., Emission Limiting Standards, you could use the proposed New Source Performance Standard (NSPS) for Diesel Engines Subpart FF, 40 CFR 60 and/or AP 42 emission factors to estimate emissions rates for all criteria pollutants. Please attach calculations.

The NO_x emission limit should also be expressed in terms of concentration (PPM).

What type of control technique will you be using to reduce NO_x emission from these two units?

We also want to point out that the processing fee for your project must comply with section 17-4.05(4)(a)4., FAC. "Construction permit for a source having potential emissions of more than 25 tons per year of any single pollutant is $250.00." Based on this, you need to send a check for $200.00 since you already submitted a $300.00 check to our Orlando office.

As soon as the requested information is received, we will begin processing your applications. If you have any questions on the data requested, please contact this office at (904)488-1344. Larry George should be contacted on any questions related to PSD applicability, and Teresa Heron on the other data requested.

Sincerely,

C. H. Fancy, P. E.
Deputy Chief
Bureau of Air Quality
Management

CHF/ths

CITY OF ST. CLOUD, FLORIDA

1300 NINTH STREET • ST. CLOUD, FLORIDA 32769

PHONE:
(305) 892-2161

October 26, 1982

DER
OCT 28 1982
BAQM

Mr. Charles M. Collins, P.E.
Air Engineering
STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATIONS
St. Johns River District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

REFERENCE: Osceola County - AP
City of St. Cloud Municipal Power Plant
AC49-61237 and AC49-61239

Dear Mr. Collins:

In accordance with your October 12, 1982 letter concerning our permits to construct diesel engines number one and number two we are hereby attaching the following:

1. Four copies of the completed application.
2. Section IA blanks are filled in.
3. Section IIA - further discussion has been provided on the type of construction.
4. Section IID blanks are filled in.
5. Section IIIC - emission data has been completed and supplied.
6. Section IIIE - ash and nitrogen figures for oil are provided.
7. Section IIIH - stack diameter and velocity is supplied.

Additionally in accordance with your request, by copy of this letter to you with attachments we are submitting a complete application to Mr. Bill Thomas, Department of Environmental Regulations, Tallahassee, Florida 32301.

Sincerely,

Roxy S. Howse, P.E.
Public Works Director/City Engineer

RSH/kb
Attachments

cc: James V. Chisholm, City Manager
Mr. Bill Thomas
Bud Somers

AC 49-61239

RECEIVED
300
OCT 08 1982
SAINT JOHNS
RIVER DISTRICT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

DER
OCT 28 1982
BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: DIESEL ENGINE GENERATOR [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: CITY OF ST. CLOUD MUMICIPAL POWER PLANT COUNTY: OCEOLA

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) DIESEL ENGINE GENERATOR, DUEL FUEL, #2 DIESEL FUEL AND NATURAL GAS FIRED

SOURCE LOCATION: Street 1718 10th STREET City ST. CLOUD

UTM: East 407,000 North 1,423,000

Latitude 28 ° 14 ' 41 "N Longitude 81 ° 17 ' 17 "W

APPLICANT NAME AND TITLE: CITY OF ST. CLOUD

APPLICANT ADDRESS: 1300 9th STREET, ST. CLOUD FLORIDA, 32769

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CITY OF ST. CLOUD

I certify that the statements made in this application for a INSTALLATION permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: James V. Chisholm

James V. Chisholm, City Manager
Name and Title (Please Type)

Date: 10/7/82 Telephone No. (305) 892-2161

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed: Roxy S. Howse

Roxy S. Howse, P.E., Public Works Director/
Name (Please Type) City Engineer

(Affix Seal)

CITY OF ST. CLOUD
Company Name (Please Type)

1300 Ninth Street, St. Cloud, Florida 32769
Mailing Address (Please Type)

Florida Registration No. 11958 Date: 10/7/82 Telephone No. (305) 892-2161

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

THIS GENERATOR IS UNIT NO. 3 / IN TH ST. CLOUD POWER PLANT. RATED 2500 kVA AND DRIVEN BY A FAIRBANKS MORSE ENGINE MODEL 38TDD818. IT OPERATED ON NATURAL GAS AND/OR #2 DIESEL FUEL. INSTALL ABOVE DESIGNATED ENGINE AND GENERATOR ON EXSISTING MODIFIED FOUNDATION. INSTALL ALL PIPING FOR FUEL OIL, GAS, OIL, WATER FOR COOLING TOWER PLUS INSTALLATION OF A COOLING TOWER. Will result in full compliance.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction N/A Completion of Construction N/A

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

NONE PROVIDED

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

OPERATING PERMIT NONE ISSUED , EXPIRED

DER NOTICE DATED

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes X No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 36 ; if power plant, hrs/yr 6000 ;

if seasonal, describe:

G. If this is a new source or major modification, answer the following questions. (Yes or No) THIS IS AN EXISTING SOURCE.

1. Is this source in a non-attainment area for a particular pollutant?
   a. If yes, has "offset" been applied?
   b. If yes, has "Lowest Achievable Emission Rate" been applied?
   c. If yes, list non-attainment pollutants.
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII.
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): N/A

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: SEE VISIBLE EMISSION TEST REPORT.

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
NO_x As NO_2	9.0	27.0	NATURAL GAS/DIESEL ENGINES		9.0	39.42	SEE DWG.
SO_2	0.1	0.3	ARE NOT COVERED IN		0.1	0.43	NO. 1
CO	1.2	3.6	CH. 17-2.05 (6), TABLE II		1.2	5.25	& 2
HC	0.4	1.2	FOR ALLOWED EMISSIONS.		0.4	1.75	
PARTICULATE	0.04	0.12			0.04	0.175	

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5]

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard

[4] Emission, if source operated without control (See Section V, Item 3)

[5] If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
NATURAL GAS (95%)	8.65 MCF/HR	17.29 MCF/HR	16.03 MMBtu/Hr.
#2 DIESEL FUEL (5%)	52.4 LB/HR	52.4 LB/HR	0.995 MMBtu/HR.
			BASED ON 9969 Btu/KWH
			FOR THIS UNIT ON OIL

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: NATURAL GAS: 0% #2 FUEL 0.4% Percent Ash: .01

Density: #2 FUEL 7.132 lbs/gal Typical Percent Nitrogen: NONE

Heat Capacity: NAT. GAS-927.1 BTU/FT.3-LHV ~~#2 FUEL 18171 BTU/LB-LHV~~ BTU/lb 129596 LHV BTU/gal

Other Fuel Contaminants (which may cause air pollution): NONE

F. If applicable, indicate the percent of fuel used for space heating. Annual Average N/A Maximum

G. Indicate liquid or solid wastes generated and method of disposal.

LUBE OIL RECLAIMED OR SALVAGED

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 50.69 ft. Stack Diameter: 20 inches ft.

Gas Flow Rate: 8,064 ACFM Gas Exit Temperature: 400-800 °F.

Water Vapor Content: NIL % Velocity: 150 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste

Total Weight Incinerated (lbs/hr) Design Capacity (lbs/hr)

Approximate Number of Hours of Operation per day days/week

Manufacturer

Date Constructed Model No.

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner [ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: ^{o}F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy*: h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:
2. Efficiency*:
3. Capital Cost:
4. Life:
5. Operating Cost:
6. Energy:
7. Maintenance Cost:
8. Manufacturer:
9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

2. Instrumentation, Field and Laboratory

a) Was instrumentation EPA referenced or its equivalent? ____ Yes ____ No

b) Was instrumentation calibrated in accordance with Department procedures? ____ Yes ____ No ____ Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from _____/_____/_____ to _____/_____/_____
month day year month day year

2. Surface data obtained from (location) _____

3. Upper air (mixing height) data obtained from (location) _____

4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO^2	_____ grams/sec

E. Emission Data Used in Modeling

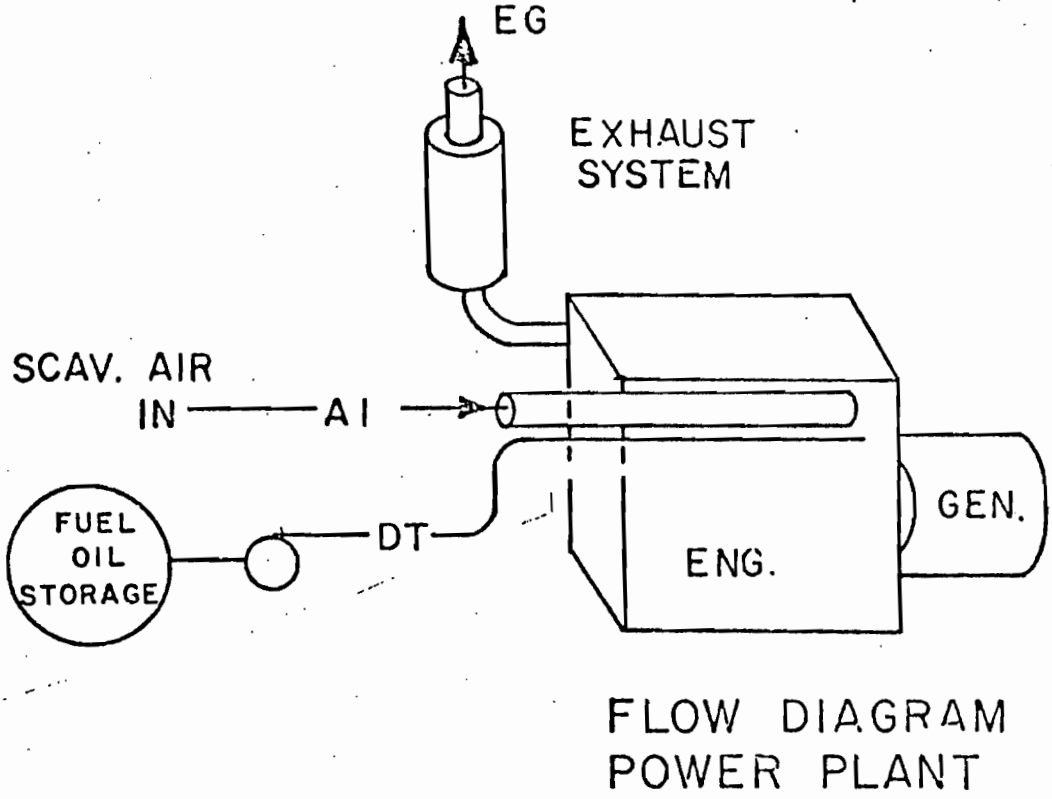
Attach list of emission sources. Emission data required is source name, description on point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

*Specify bubbler (B) or continuous (C).

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

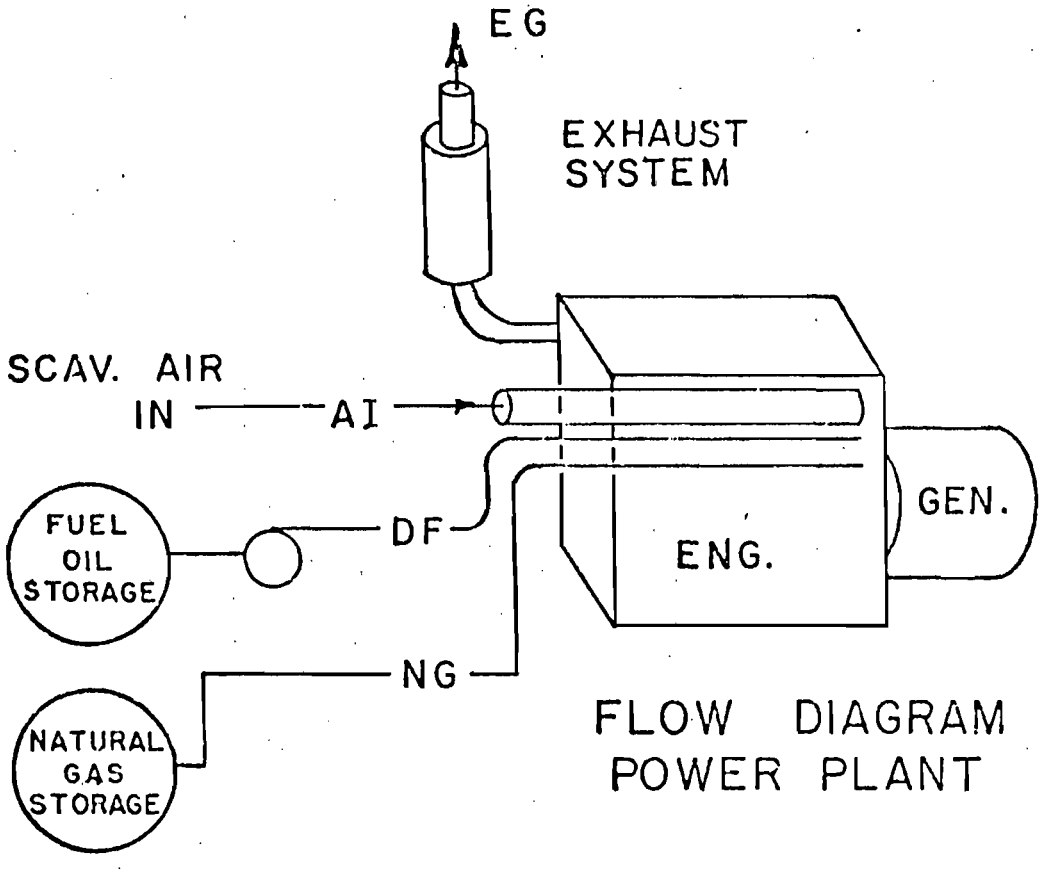
H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.



FLOW DIAGRAM
POWER PLANT

TYPICAL FOR OIL UNITS

DRAWING NUMBER ONE



FLOW DIAGRAM
POWER PLANT

TYPICAL FOR DUAL FUEL UNITS

DRAWING NUMBER TWO

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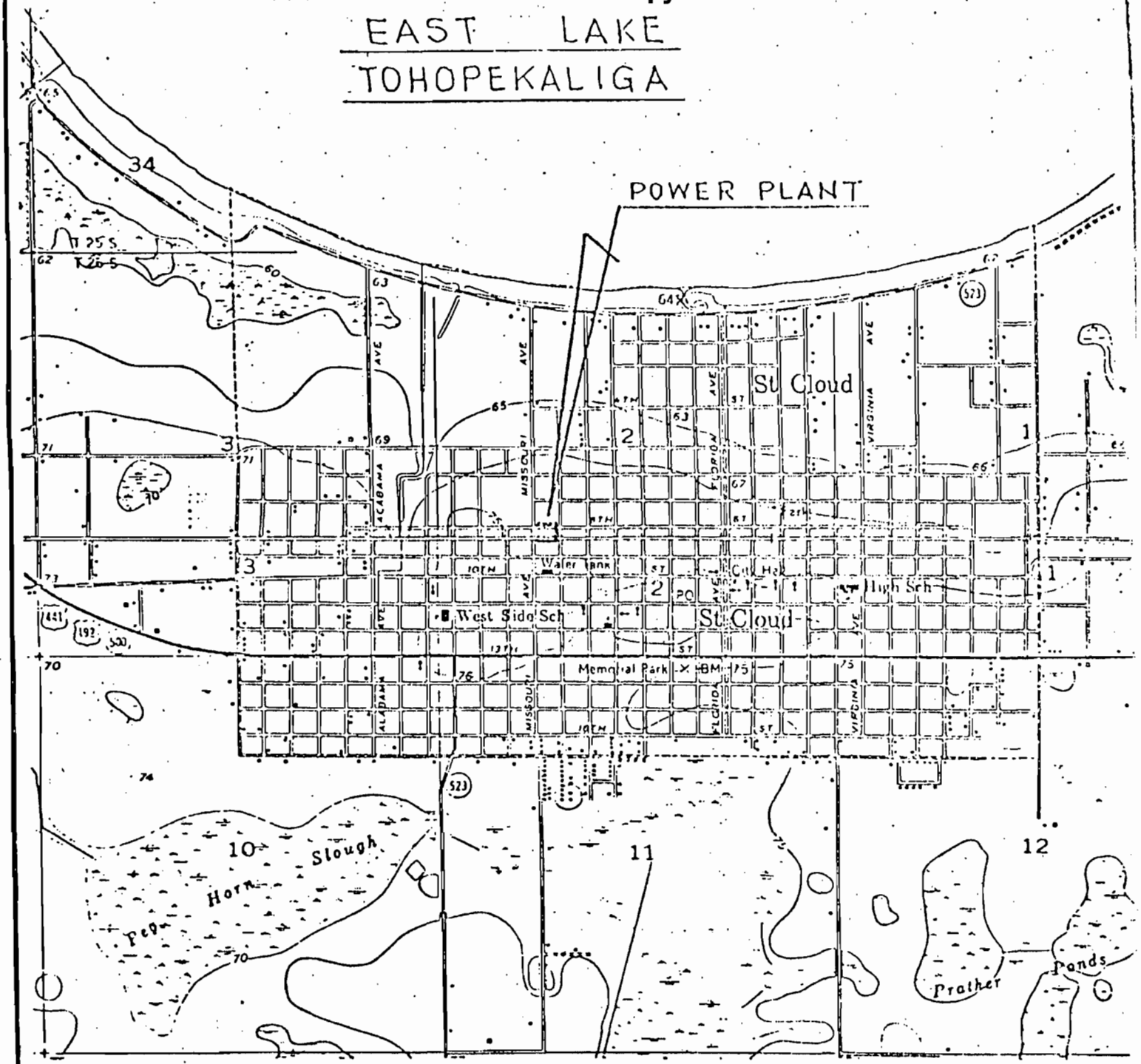
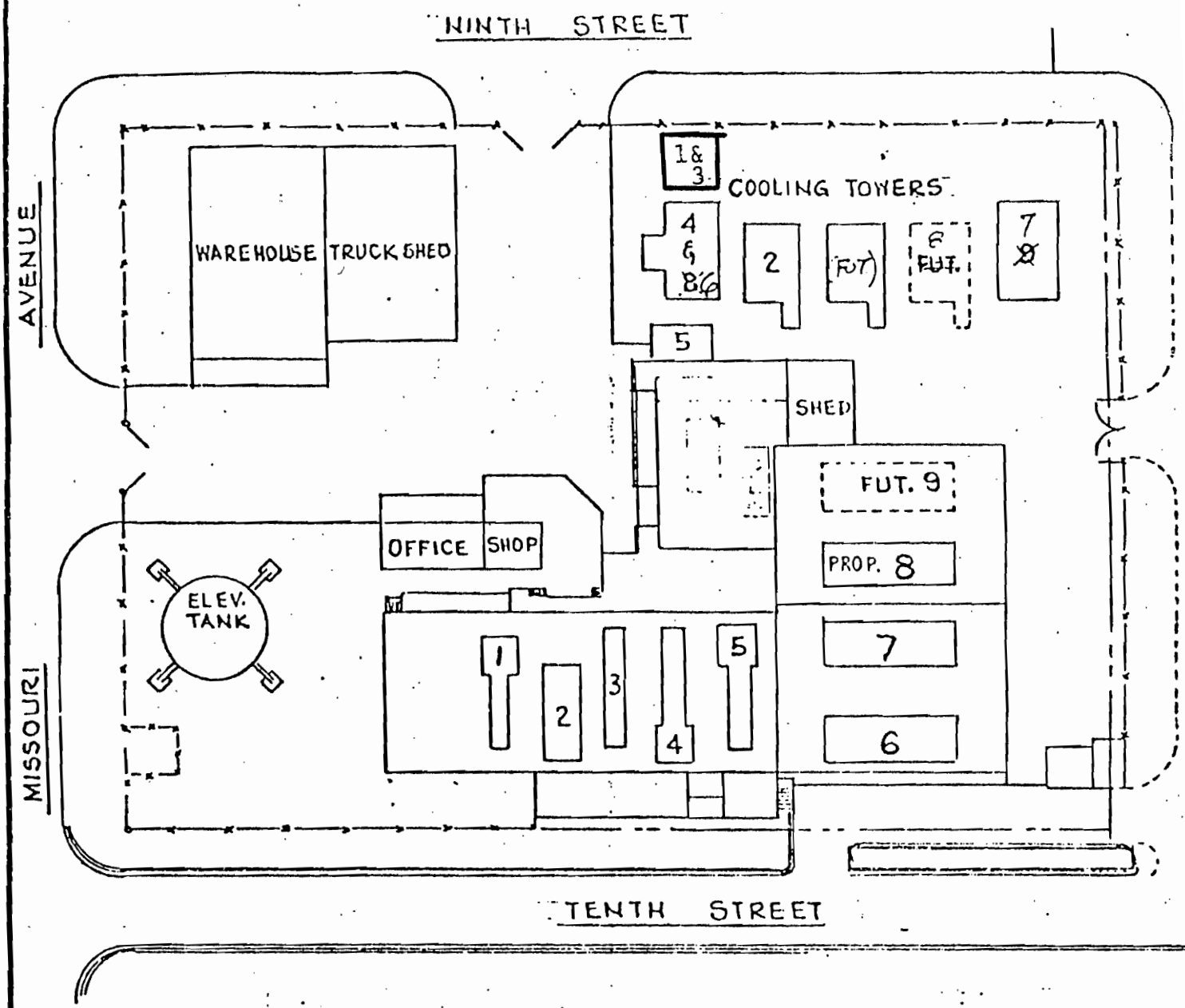


PLOT PLAN
POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 7



POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 8

AC 49-61237

DER

OCT 28 1982

BAQM

300

OCT 08 1982

SAINT JOHNS RIVER DISTRICT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: DIESEL ENGINE GENERATOR [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: CITY OF ST. CLOUD MUNICIPAL POWER PLANT COUNTY: OCEOLA

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) ~~DIESEL ENGINE GENERATOR, DUEL FUEL,~~ #2 DIESEL FUEL AND NATURAL GAS FIRED

SOURCE LOCATION: Street 1718 10th STREET City ST. CLOUD

UTM: East 407,000 North 1,423,000

Latitude 28 ° 14 ' 41 "N Longitude 81 ° 17 ' 17 "W

APPLICANT NAME AND TITLE: CITY OF ST. CLOUD

APPLICANT ADDRESS: 1300 9th STREET ST. CLOUD, FLORIDA 32769

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of CITY OF ST. CLOUD

I certify that the statements made in this application for a INSTALLATION permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: James V. Chisholm

James V. Chisholm, City Manager
Name and Title (Please Type)

Date: 10/7/82 Telephone No. (305)892-2161

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed:

Roxy S. Howse, P.E., Public Works Director/
Name (Please Type) City Engineer

(Affix Seal)

CITY OF ST. CLOUD
Company Name (Please Type)

1300 Ninth Street, St. Cloud, Florida 32769
Mailing Address (Please Type)

Florida Registration No. 11958 Date: 10/7/82 Telephone No. (305)892-2161

[1]See Section 17-2.02(15) and (22), Florida Administrative Code, (F.A.C.)

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

THIS GENERATOR IS UNIT NO. 1 IN THE ST. CLOUD POWER PLANT. RATED 2500 kVA AND DRIVEN BY A FAIRBANKS MORSE ENGINE MODEL 38TDD818. IT OPERATED ON NATURAL GAS AND/OR #2 DIESEL FUEL. INSTALL ABOVE DESIGNATED ENGINE AND GENERATOR ON EXSISTING MODIFIED FOUNDATION. INSTALL ALL PIPING FOR FUEL OIL, GAS, OIL, WATER FOR COOLING TOWER PLUS INSTALLATION OF A COOLING TOWER. Will result in full compliance.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction N/A Completion of Construction N/A

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

NONE PROVIDED

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

OPERATING PERMIT NONE ISSUED , EXPIRED

DER NOTICE DATED

E. Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? ____ Yes __X__ No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 36 ; if power plant, hrs/yr 6000 ;

if seasonal, describe:

G. If this is a new source or major modification, answer the following questions. (Yes or No) THIS IS AN EXISTING SOURCE.

1. Is this source in a non-attainment area for a particular pollutant?
   a. If yes, has "offset" been applied?
   b. If yes, has "Lowest Achievable Emission Rate" been applied?
   c. If yes, list non-attainment pollutants.
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirements apply to this source? If yes, see Sections VI and VII.
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): N/A

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: SEE VISIBLE EMISSION TEST REPORT.

Name of Contaminant	Emission[1]		Allowed Emission[2] Rate per Ch. 17-2, F.A.C.	Allowable[3] Emission lbs/hr	Potential Emission[4]		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
NO_x As_2 No	9.0	27.0	NATURAL GAS/DIESEL ENGINES		9.0	39.42	SEE DWG.
SO_2	0.1	0.3	ARE NOT COVERED IN		0.1	0.43	NO. 1
CO	1.2	3.6	CH. 17-2.05 (6), TABLE II		1.2	5.25	& 2
HC	0.4	1.2	FOR ALLOWED EMISSIONS.		0.4	1.75	
PARTICULATE	0.04	0.12			0.04	0.175	

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles[5] Size Collected (in microns)	Basis for Efficiency (Sec. V, It[5]

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g., Section 17-2.05(6) Table II, E. (1), F.A.C. – 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard

[4]Emission, if source operated without control (See Section V, Item 3)

[5]If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
NATURAL GAS (95%)	8.65 MCF/HR	17.29 MCF/HR	16.03 MMBTU/HR.
# 2 DIESEL FUEL (5%)	52.4 LB/HR	52.4 LB/HR	0.995 MMBtu/HR
			BASED ON 9969 Btu / KWH
			FOR THIS UNIT ON OIL

*Units Natural Gas, MMCF/hr; Fuel Oils, barrels/hr; Coal, lbs/hr

Fuel Analysis:

Percent Sulfur: NATURAL GAS: 0% #2 FUEL 0.4% Percent Ash: .01

Density: #2 FUEL 7.132 lbs/gal Typical Percent Nitrogen: NONE

Heat Capacity: NAT. GAS-927.1 BTU/FT.3-LHV / ~~#2 FUEL-18171 BTU/LB-LHV~~ BTU/lb 129596 LHV BTU/gal

Other Fuel Contaminants (which may cause air pollution): NONE

F. If applicable, indicate the percent of fuel used for space heating. Annual Average N/A Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

LUBE OIL RECLAIMED OR SALVAGED

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 50.69 ft. Stack Diameter: 20 inches ft.

Gas Flow Rate: 8,034 ACFM Gas Exit Temperature: 400-800 °F.

Water Vapor Content: NIL % Velocity: 150 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq & Gas By-prod.)	Type VI (Solid By-prod.)
Lbs/hr Incinerated							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ days/week _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (^oF)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner [ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight – show derivation.
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.,) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, etc.).
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3, and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8½" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8½" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8½" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. An application fee of $20, unless exempted by Section 17-4.05(3), F.A.C. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy) [ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:
5. Useful Life:
6. Operating Costs:
7. Energy:
8. Maintenance Cost:
9. Emissions:

Contaminant	Rate or Concentration

*Explain method of determining D 3 above.

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy*: h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy**: h. Maintenance Costs:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

*Explain method of determining efficiency.

**Energy to be reported in units of electrical power – KWH design rate.

3.

a. Control Device:

b. Operating Principles:

c. Efficiency*: d. Capital Cost:

e. Life: f. Operating Cost:

g. Energy: h. Maintenance Cost:

*Explain method of determining efficiency above.

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space and operate within proposed levels:

4.

a. Control Device

b. Operating Principles:

c. Efficiency*:

d. Capital Cost:

e. Life:

f. Operating Cost:

g. Energy:

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:
2. Efficiency*:
3. Capital Cost:
4. Life:
5. Operating Cost:
6. Energy:
7. Maintenance Cost:
8. Manufacturer:
9. Other locations where employed on similar processes:

a.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

*Explain method of determining efficiency above.

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

b.

(1) Company:

(2) Mailing Address:

(3) City:

(4) State:

*Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions*:

Contaminant	Rate or Concentration

(8) Process Rate*:

10. Reason for selection and description of systems:

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SECTION VII – PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

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b) Was instrumentation calibrated in accordance with Department procedures? _____ Yes _____ No _____ Unknown

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month day year month day year

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F. Attach all other information supportive to the PSD review.

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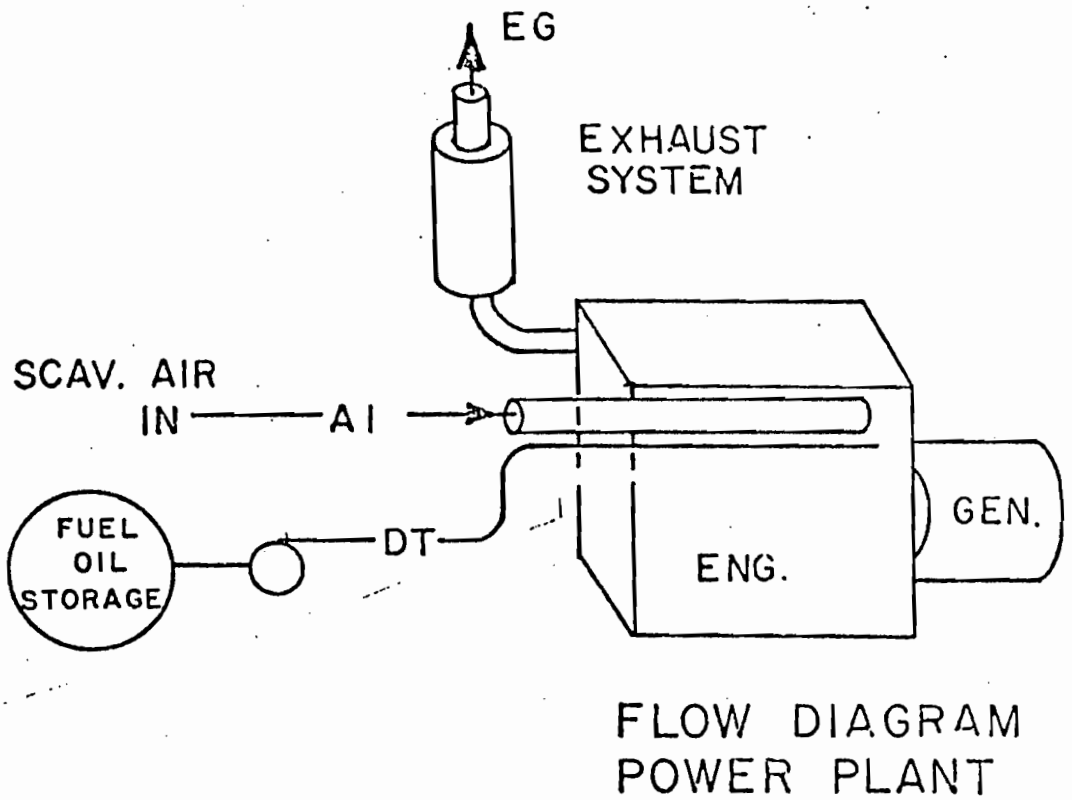

FLOW DIAGRAM
POWER PLANT

TYPICAL FOR OIL UNITS

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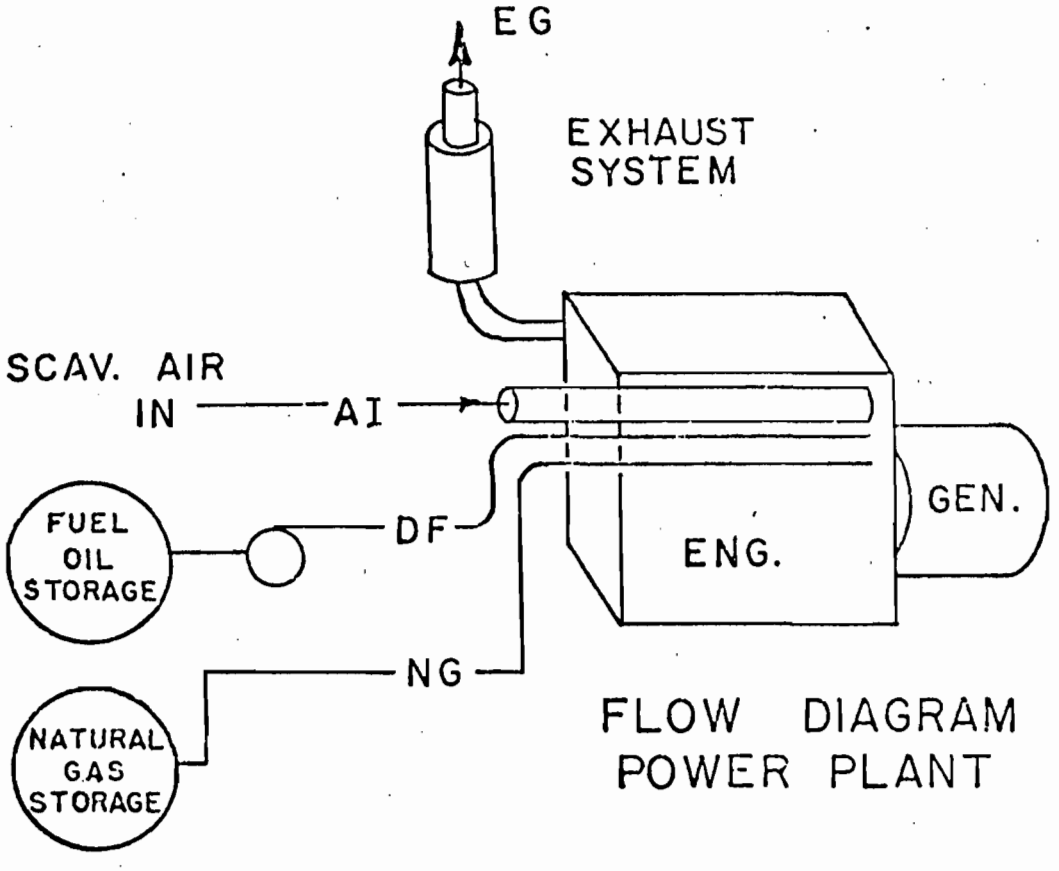
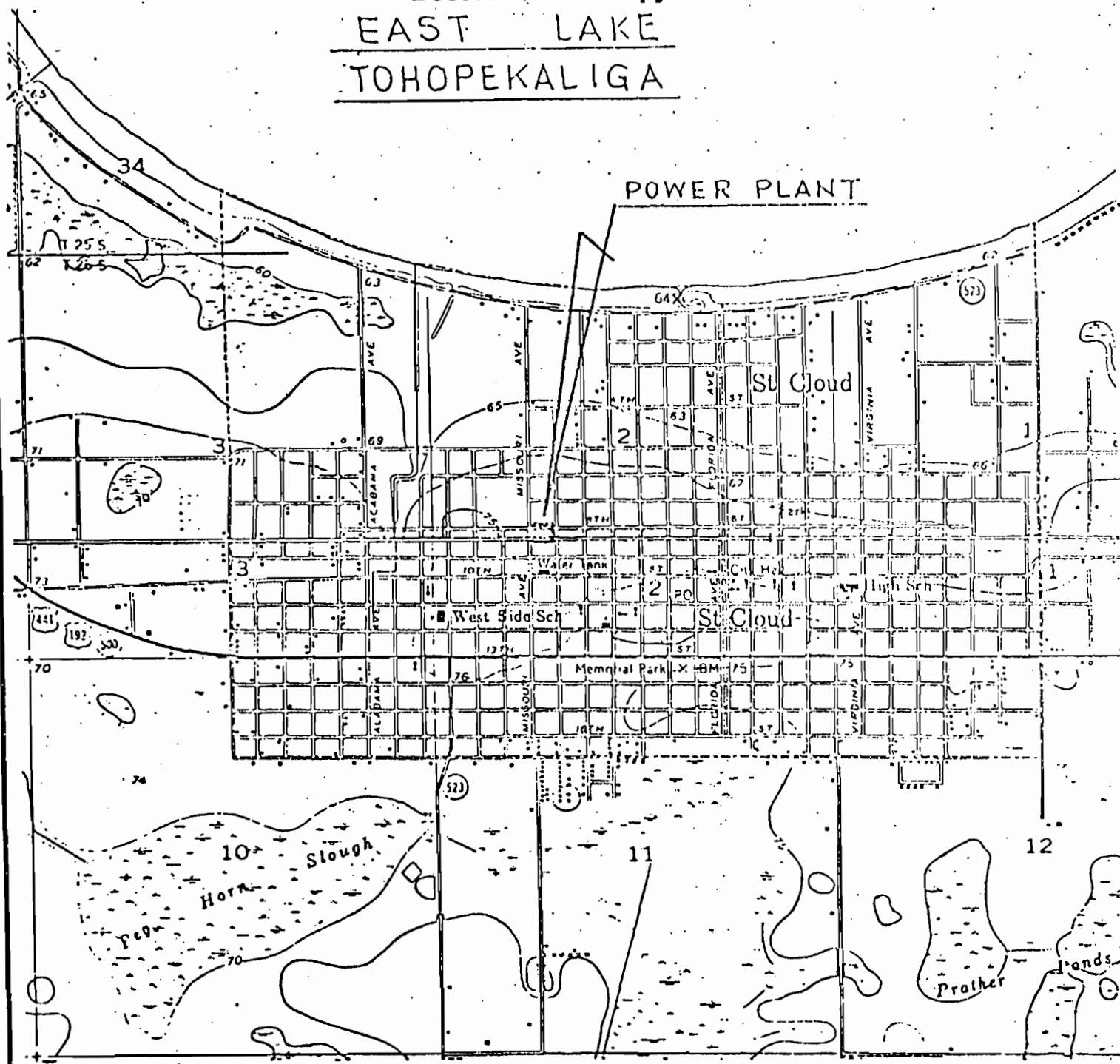


FLOW DIAGRAM
POWER PLANT

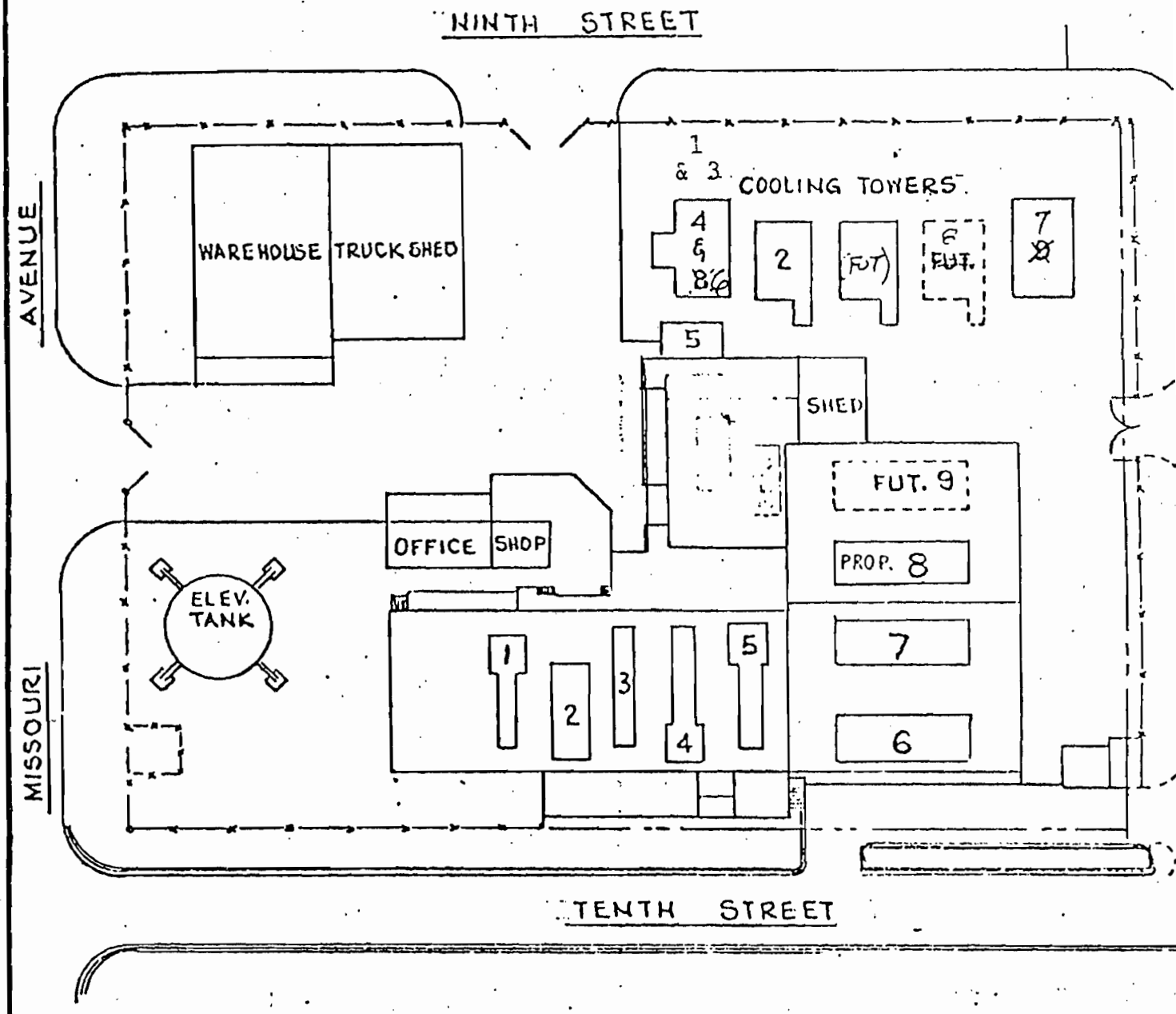
TYPICAL FOR DUAL FUEL UNITS

DRAWING NUMBER TWO



PLOT PLAN
POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 7



POWER PLANT
ST. CLOUD, FLORIDA

SUPPLEMENTAL REQUIREMENT
ITEM NUMBER 8