

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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Albin W. Smith
President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500

May 24, 1985

Enclosed is Permit Number AC 06-100328 to Belcher Oil Company, Port Everglades Terminal to construct two vertical lube oil tanks, issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the clerk of the Department.

Sincerely,

Willard Hanks
for

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

Enclosure

cc: Michael K. Gleman, P.E.
Gary Carlson
Tom Tittle

CERTIFICATION

This is to certify that the foregoing Notice of Permit and all copies requested were mailed before the close of business on May 24, 1985.

Willard Hanks

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

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Patricia G. Adams
Clerk

May 24, 1985
Date

Final Determination

Belcher Oil Company - Port Everglades
Broward County
Ft. Lauderdale, Florida

Permit Number:
AC 06-100328

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

May 16, 1985

Response to Public Comment

Belcher Oil Company - Port Everglades
Ft. Lauderdale, Florida

The application to remove one (1) existing horizontal above-ground lube oil tank (20,000 gallons capacity) and to install two (2) new vertical above-ground lube oil tanks (30,000 gallons capacity each) in the space provided by the removed tank has been reviewed by the department. Public Notice of the department's Intent to Issue was published in the Ft. Lauderdale News/Sun-Sentinel on April 6, 1985. Copies of the technical evaluation and preliminary determination were available for public inspection at the department's Southeast Florida District office and Bureau of Air Quality Management office and the Broward County's Environmental Quality Control Board office.

Comments were received from the department's Southeast Florida District office. The response to these comments will be contained in the following:

Comment 1: see attachment

Response 1: None required

Comment 2: see attachment

Response 2: FAC Rule 17-2 requires that new construction that has the potential to emit any pollutant be permitted. And, in order to be federally enforceable, a construction permit would be issued prior to any action on an operation permit. Due to the location of the proposed action, it was also necessary to assure the type of petroleum product to be stored in the two new storage tanks.

Comment 3: see attachment

Response 3: Specific Conditions Nos. 2, 3, and 5 will be deleted.

Attachment to be Incorporated:

2. Interoffice Memorandum from the Southeast Florida District office dated April 3, 1985.

It is recommended that the construction permit be issued as drafted, with the above revisions and Attachment incorporated.

ATTACHMENT 2

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: Bill Thomas/Bruce Mitchell, BAQM
FROM: Tom Tittle/I. Goldman, SEFD
RE: Belcher Oil Company Construction Permit, File No.
AC06-100328, for Two Lube Oil Tanks; Comments on:
DATE: April 3, 1985

1. We were not able to comment sooner as we did not receive a copy of the application when it was submitted. At the least, a search of our records indicates no copy was ever filed.

2. Since the emissions from the proposed storage tanks are not volatile organic compounds (VOC) because their vapor pressure is less than .1 mm of Hg. at standard conditions (actually 2.63×10^{-5} mm) but are hydrocarbons which are not regulated under Chapter 17-2, why issue a construction permit at all? Especially since only 0.16 pounds per year of this unregulated pollutant is involved.

A suggested alternative procedure would be to notify the applicant that the proposed project does not require a construction permit, public notice or fees, but he must request a modification of the existing operation permit by submitting notification of completion of construction when the proposed project is completed.

3. If a construction permit is issued we recommend that Specific Conditions 2,3,4 and 5 be replaced by a single specific condition that requires the applicant to submit an Annual Operation Report which verifies that only lube oil was stored in the proposed tanks.

IG:sw:I

DER
APR 11 1985
BAQM

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:
Belcher Oil Company
Port Everglades Bulk Gasoline
Terminal
P.O. Box 525500
Ft. Lauderdale, Florida 33152

Permit Number: AC 06-100328
Expiration Date: March 31, 1986
County: Broward
Latitude/Longitude: 26° 05' 40" N/
80° 07' 39" W
Project: Construction of two vertical
30,000 gallon lube oil
storage tanks (Nos. 11 & 14)

This permit is issued under the provisions of Chapter 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 construction of two new vertical 30,000 gallon lube oil storage tanks, designated Tanks 11 and 14 (to be located at the site of an existing lube oil storage tank [No. 11], which is to be dismantled).

Construction shall be in accordance with the permit application and plans, documents, amendments and drawings, except as otherwise noted on pages 5 and 6 of the "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.202(1), and Michael K. Gleman's cover letter, received February 28, 1985.
2. Interoffice Memorandum from the Southeast Florida District Office, dated April 3, 1985.

PERMITTEE:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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.

PERMITTEE:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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 petroleum product to be stored in Tanks 11 and 14 is lube oil.
2. A monthly record of lube oil throughput shall be maintained, with an annual report to be submitted to the DER's Southeast Florida District office or its designee.
3. Crew efficiency shall be utilized to prevent spillage of lube oil. In the event of excessive spills, DER's Southeast Florida District office or its designee shall be notified.
4. Objectionable odors shall not be allowed off plant property.

PERMITTEE:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

SPECIFIC CONDITIONS:

5. Prior to 90 days before the expiration date of this permit, a complete application for an operating permit shall be submitted to the DER's Southeast Florida District office or its designee. Full operation of the sources may then be conducted in compliance with the terms of this permit until the expiration date contained in this permit or receipt of an operating permit.

Issued this 17 day of May,
1985.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

Technical Evaluation
and
Preliminary Determination

Belcher Oil Company-Port Canaveral
Brevard County
Cape Canaveral, Florida

Permit Numbers:
AC 05-090952
AC 05-092822
AC 05-094507

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

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Applications

The Department of Environmental Regulation gives notice of its intent to issue permits to the Belcher Oil Company - Port Canaveral to modify five petroleum storage tanks and the south loading rack-vapor recovery system and to decommission one petroleum storage tank at its existing bulk gasoline and petroleum storage/transfer facility in Cape Canaveral, Brevard County, Florida. A determination of best available control technology (BACT) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and 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 an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

I. PROJECT DESCRIPTION

A. Applicant
 Belcher Oil Company
 P. O. Box 525500
 Miami, Florida 33152

B. Project and Location

The applicant proposes to increase the existing vapor recovery system's allowable VOC (volatile organic compounds) emission rate at the South Loading Rack to 35 milligrams of total organic compounds per liter of gasoline loaded, to decommission one existing gasoline storage tank No. 8 (facility identification number), to convert/renovate the existing gasoline storage tank No. 7 to a fixed roof tank for accommodating diesel fuel, and to increase the annual gasoline throughput of the existing gasoline storage tanks Nos. 9, 15, 17 and 18, without increasing the annual permitted allowable gasoline dispensed of 3,600,000 barrels at the South Loading Rack. The gasoline throughput of the storage tanks Nos. 7 and 8 will be allotted to the storage tanks Nos. 9, 15, 17 and 18. The following Table 1 will display the applicant's projected annual throughputs of gasoline:

Table 1

Gasoline Storage Tank ID	Storage Capacity (Bbls)	Annual Throughput (Bbls/yr)	
		Current	Proposed
7	55,000	521,053	-0-
8	35,000	331,579	-0-
9	35,000	331,579	434,491
15	55,000	521,053	682,797
17	100,000	947,368	1,241,356
18	100,000	947,368	1,241,356
Total:		3,600,000	3,600,000

Table 2 will display the applicants projected annual throughput of diesel fuel in the storage tank No. 7:

Table 2

Diesel Fuel Storage Tank ID	Storage Capacity (Bbls)	Annual Throughput (Bbls/yr)	
		Current	Proposed
7	55,000	-0-	811,000

The existing bulk gasoline and petroleum storage/transfer terminal is located at No. 10 Tanker Turn Road, Cape Canaveral, Florida, with UTM coordinates of Zone 17-589.9 km East and 3142.0 km North. The terminal is also located in an area designated attainment for all pollutants.

C. Process and Controls

The process of handling petroleum products is not changing at the existing facility. The increase in annual throughput of gasoline in the existing petroleum storage tanks (PST) Nos. 9, 15, 17 and 18, will increase the annual potential VOC emissions per source. There will be an increase in VOC potential emissions after renovating PST No. 7 with a fixed roof and switching from gasoline to diesel fuel storage. The increase in the allowable VOC emission rate of the South Loading Rack's vapor recovery system (SLR-VRS) will increase the hourly and annual potential VOC emissions. The following Table 3 will display the current and projected potential VOC emissions from each source:

Table 3

Source Identification	Potential VOC Emissions (lbs/yr)	
	Current	Projected
PST		
7	1,534	2,180
8	1,228	-0-
9	1,228	1,238
15	42,537	42,591
17	2,189	2,205
18	2,189	2,205
SLR-VRS:	30,167	44,465
	Total: 81,072	94,884
	40.5 TPY	47.4 TPY

Note: o The maximum annual gasoline permitted to be dispensed from the South Loading Rack is 3,600,000 barrels.

o The PST VOC potential emissions are the sum of the standing storage and withdrawl losses.

Existing PST Nos. 9, 17 and 18, have a liquid mounted resilient primary seal with a rim mounted secondary seal. Existing PST No. 15 has a vapor mounted resilient primary seal with a rim mounted secondary seal.

II. RULE APPLICABILITY

The pollutants emitted from the affected PST Nos. 7, 9, 15, 17 and 18, and the SLR-VRS, are classified as volatile organic compounds (VOC) by definition in accordance with FAC Rule 17-2.100(179). Table 4, on the following page, exhibits the potential VOC emissions from each source and the total potential VOC emissions from the facility.

Since the existing facility is located in an area designated attainment for all criteria pollutants, review shall be in accordance with FAC Rule 17-2.500, Prevention of Significant Deterioration (PSD).

PST No. 8 is to be decommissioned, PST No. 7 is to be renovated to accommodate diesel fuel and their annual permitted gasoline throughput will be allotted to the affected PST Nos. 9, 15, 17 and 18. By increasing the permitted gasoline throughput, there will be an increase in actual VOC emissions per affected source, which is a modification in accordance with FAC Rule 17-2.100(105).

The applicant requested that the VOC emission rate at the SLR be increased to an allowable limit of 35 milligrams of total organic compounds per liter of gasoline loaded, which is the same rate as that contained in the NSPS, 40 CFR 60, Subpart XX, which was adopted by reference according to FAC Rule 17-2.660. This increase in the VOC emission rate will increase the actual VOC emissions at the SLR, which is a modification by definition. A vapor recovery system (VRS) has been installed to maintain compliance with the allowable emission rate.

The existing terminal is a minor facility in accordance with FAC Rule 17-2.100 (103). Since the proposed action is a minor modification (see Table 3) to a minor facility, new source review requirements are not required in accordance with FAC Rule 17-2.500(2)(d)3.

PST Nos. 17 and 18 are NSPS (new source performance standards) sources and subject to 40 CFR 60, Subpart K, which was adopted by reference according to FAC Rule 17-2.660.

PST Nos. 7, 9 and 15 are not NSPS sources. Since there are no specific emission limiting standards contained in FAC Rule 17-2.600 for these type of sources, the VOC emission limits for PST Nos. 7, 9 and 15 will be permitted in accordance with FAC Rule 17-2.620(1) and (2), General Pollutant Emission Limiting Standards.

Compliance with the VOC emission rate limit set for the VRS servicing the gasoline dispensing connections at the SLR shall be in accordance with FAC Rule 17-2.700(6)(c)2.b.(i).

Table 4

Source	Potential VOC Emissions (lbs/yr)			Total
	Breathing/ Standing	Working/ Withdrawal	Loading Racks	
PST ¹				
#1	1,620	781		2,401
#2	57	4		61
#3	906	121		1,027
#4 ²	--	--		--
#5 ²	--	--		--
#6 ²	--	--		--
#7	1,226	954		2,180
#8	0	0		0
#9	1,195	43		1,238
#10 ³	2,486	232		2,718
#11 ³	2,486	232		2,718
#12	235	88		323
#13	235	88		323
#14 ²	--	--		--
#15	42,537	54		42,591
#17	2,136	69		2,205
#18	2,136	69		2,205
NLR ⁴ : Dispensers	2 Diesel		373.0	
	1 No. 6 Fuel Oil		2.5	708.8
	1 Jet Kerosene		61.8	
	1 AC-20/RC-70		271.5	
SLR-VRS ⁵ :				
Dispensers	4 Gasoline		44,159.1	
	2 Diesel		248.1	44,465.2
	1 Jet Kerosene		15.4	
	1 Ethanol		42.6	
Facility Totals				
lbs/yr	57,255.0	2,735.0	45,174.0	105,164.0
TPY	28.6	1.4	22.6	52.6

- There is no PST No. 16; PST No. 8 has been decommissioned.
- Emissions were not calculated for AC-20 asphalt due to extremely low vapor pressure.
- RC-70 product: 70% asphalt, 30% naptha; emissions were calculated using product characteristics of naptha.
- Product throughput in barrels/yr:

Diesel	487,000
No. 6 Fuel Oil	366,000
Jet Kerosene	67,200
RC-70	12,000

Assume: 34,000 gallons of petroleum product can be loaded per dispenser per hour.
- Product throughput in barrels/yr:

Gasoline	3,600,000
Diesel	324,000
Jet Kerosene	16,800
Ethanol	71,429

Assume: 1) 34,000 gallons of petroleum product can be loaded per dispenser per hour; and,
2) Efficiency of the VRS is 98% removal of pollutant (vendor specifications).

Compliance with the VOC potential emissions projected for all of the other sources, including the non-gasoline dispensers at the SLR, shall be periodic visual inspections of the sources and their associated equipment to assure proper operation and maintenance in accordance with FAC Rule 17-2.620(1). Also, no objectionable odors shall be allowed off of the terminal property according to FAC Rule 17-2.620(2).

III. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS

A. Emission Limitations

The pollutants regulated from the affected source are volatile organic compounds (VOC). Table 5 will reflect the VOC allowable emission rate applicable to the SLR-VRS:

Table 5

<u>Source</u>	<u>Allowable VOC Emission Rate</u>
SLR-VRS	35 milligrams total organic compounds per liter of gasoline loaded

Note: The SLR consists of two sections, "A" and "B", which contain the following dispensing connections, type of products dispensed, and projected annual emissions:

<u>SLR-A</u>	<u>SLR-B</u>	<u>Projected Annual VOC Emissions</u>
2 Gasoline	2 Gasoline	44,159.1 lbs/yr (total)
1 Diesel	1 Diesel	248.1 lbs/yr (total)
1 Jet Kerosene		15.4 lbs/yr
	1 Ethanol	42.6 lbs/yr

The permitted allowable VOC emission rate is in compliance with all applicable requirements of FAC Chapter 17-2.

All unexpected VOC emissions that will occur by handling, transferring, and storage of gasoline, ethanol, and petroleum products, shall be properly attended to by the applicant, i.e., from correcting the problem and removal of contaminated material to final disposal. Also, DER's St. Johns River District office shall be promptly notified.

B. Air Quality Analysis

An air quality analysis was not required.

IV. CONCLUSIONS

The VOC emission rate proposed by the applicant has been determined to be in compliance with all applicable requirements of FAC Chapter 17-2.

The VOC emissions projected from this existing bulk gasoline and petroleum storage/transfer terminal are area-wide (facility) and a point-source (VRS at the SLR when loading gasoline). Compliance verification of the area-wide (facility) VOC emissions shall be by periodic visual inspections by the DER's St. Johns River District office. These visual inspections will either find that the equipment is being properly operated and maintained or that corrective action will be required. All corrective action shall be concurred with the DER's St. Johns River District office.

A compliance test shall be required of the VRS (point-source) at the SLR while loading gasoline product from the four gasoline dispensing connections.

Besides visual inspections and the point-source compliance test to reasonably assure minimal VOC emissions, there will not be any objectionable odors allowed on off-plant property.

The facility's total VOC projected potential emissions of 52.6 TPY, which reflects this project's increase of 6.9 TPY of VOC, should not cause any violation of Florida's ambient air quality standards.

The General and Specific Conditions listed in the proposed permits (attached) will assure compliance with all applicable requirements of FAC Chapter 17-2.

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

March 26, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Albin W. Smith, President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500

Dear Mr. Smith:

Re: Expiration Date Extension for the Construction Permit
No. AC 06-85700

The department is in receipt of Mr. Tommy L. Green's letter dated March 7, 1985, which requested an extension of the expiration date for the above referenced permit. The department is in agreement with the request and the following shall be changed and added:

Expiration Date:

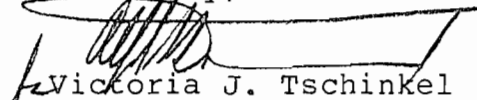
From: July 31, 1985
To: July 31, 1986

Attachment to be Incorporated:

8. Tommy L. Green's letter, dated March 7, 1985.

This letter must be attached to your construction permit, No. AC 06-85700, and shall become a part of that permit.

Sincerely,


Victoria J. Tschinkel
Secretary

VJT/ks

cc: Tom L. Green, Belcher Oil Company
Dan E. Dudley, Belcher Oil Company
Michael K. Gleman, Gleman Engineering Company
Isidore Goldman, Southeast Florida District
Gary Carlson, Broward County ECB

ATTACHMENT 8

Belcher

SEARCHED	INDEXED
SERIALIZED	FILED
MAR 12 1985	
FBI - WEST PALM BEACH	

AP

March 7, 1985

State of Florida
Department of Environmental Regulation
Southeast Florida District
P. O. Box 3858
3301 Gun Club Road
West Palm Beach, Fl. 33402-3858

Attention: Mr. Isidore Goldman

Dear Mr. Goldman:

Re: Belcher Oil Company
Port Everglades Bulk Gasoline Terminal
Permit Number: AC06-85700

Pursuant to specific condition C.2. of the subject construction permit, we are requesting a 60 day extension to the July 31, 1985 expiration date. All work in connection with the conversion of tanks PM 5, 6, 8 and 11 will not be completed in time where we could submit an application for an Operating Permit prior to 90 days before the above expiration date. A 60 day extension will allow us to complete the project and submit our application to convert to an Operating Permit ninety days prior to expiration.

Also requested is a one (1) year extension to the construction permit for the two (2) new 10,000 barrel tanks, PM 12 and 13. Management decision has postponed construction of these two tanks for at least a year.

Should you have any questions or need additional information, please call me at (305) 551-5444.

Very truly yours,

BELCHER OIL COMPANY

Tommy Green
Tommy L. Green
Senior Engineer

DER
MAR 15 1985
BAQM

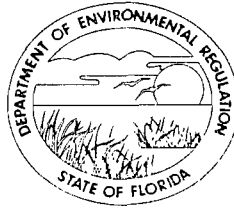
TLG:bc

cc: A. W. Smith
D. W. Carlton
D. C. Nelson
D. E. Dudley

RECEIVED
MAR 12 1985

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

March 26, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Albin W. Smith, President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500

Dear Mr. Smith:

Re: Amendment to the Construction Permit, No. AC 05-094507

The department is in receipt of Mr. Michael K. Gleman's letter with attachment dated March 6, 1985, which was a response to Mr. C. H. Fancy's letter dated February 19, 1985. Due to the response, the bureau is in agreement with Mr. Michael K. Gleman's request contained in his February 1, 1985 letter and the following shall be changed and added:

Specific Condition:

No. 5

From: If not existing, a containment dike/berm shall be erected around the storage tank No. 7 to contain spills, leaks, etc., to prevent ground-water contamination, and to aid in the clean-up of spills, leaks, etc. and prevent excess odors that could occur from the vaporization of the volatile organic compounds (VOC). If any spills, leaks, etc. occur, the DER's St. Johns River District office shall be promptly notified.

To: If any spills, leaks, etc. occur, the DER's St. Johns River District office shall be promptly notified.

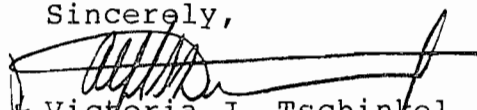
Attachments to be Incorporated:

9. Michael K. Gleman's letter, dated February 1, 1985.
10. C. H. Fancy's letter, dated February 19, 1985.
11. Michael K. Gleman's letter with attachment, dated March 6, 1985.

Mr. Albin W. Smith, President
Page Two
March 26, 1985

This letter must be attached to your construction permit, No. AC 05-094507, and shall become a part of that permit.

Sincerely,



Victoria J. Tschinkel
Secretary

VJT/ks

cc: Michael K. Gleman, Gleman Engineering Company
Dan E. Dudley, Belcher Oil Company
Tom Sawicki, St. Johns River District

ATTACHMENT 9

DER
FEB 4 1985
BAQM

GLEMAN ENGINEERING COMPANY

324 DATURA STREET
POST OFFICE BOX 3384

WEST PALM BEACH, FLORIDA 33402

TELEPHONE (305) 655-0506

EXPRESS MAIL B62563511
RETURN RECEIPT

February 1, 1985

State of Florida
Department of Environmental Regulation
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Attention: Mr. C.H. Fancy, P.E.
Deputy Chief

RE: Belcher Oil Company
DER Air Permits
Port Canaveral
Your: AC 05-090952, 094507, 0585950
Our: 84-101-1

Gentlemen:

This letter responds to a specific condition contained in the referenced air permits that requires berms around each individual storage tank at the referenced facility. These berms have not been constructed due to inadvertant oversight. Upon discovery of this condition, and in order to respond to the DER's inquiry regarding these berms, we respectfully request that this requirement be deleted and the permits be amended for the following reasons:

1. It is our feeling that spill containment berms will not significantly reduce air pollution in the event of a product spill. Berms normally contain only minor spills when compared with the catastrophic tank ruptures full sized dikes will contain. Because of this, and the sandy soil conditions at this facility, we feel any minor spill would soak into the surrounding soil before reaching the proposed berms. This would most likely have the effect of the soil "holding" the product while clean-up is being accomplished.
2. This facility has a current SPCC Plan (Spill Prevention Control and Countermeasure Plan) in effect and in accordance with 40 CFR Part 112 to rapidly respond to spills. We feel this spill prevention and clean-up plan in itself would contribute largely to the prevention of air and/or ground-water pollution.

Page Two
February 1, 1985
Mr. C.H. Fancy, P.E.

3. This facility does have major earthen dikes in place as required by fire codes.
4. We are not aware of any other code requirement for berms as specified in the referenced specific condition. We are aware that the new FAC Rule 17-61 does contain provisions and timetables that will require this facility to provide secondary containment.

Because of these reasons, we respectfully request consideration be given to deleting the specific condition for installation of individual berms for each storage tank. We are available to discuss this matter in greater detail at your convenience. Please feel free to call regarding any question.

Very truly yours,



Michael K. Gleman P.E.
President

MKG/kb

CC: Mr. Charles M. Collins, P.E. - DER
Mr. Bruce Mitchell - DER ✓
Mr. Dan E. Dudley - Belcher Oil

ATTACHMENT 10

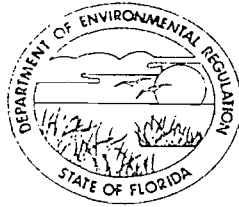
Best Available Copy

GLEMAN/2-14

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

February 19, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael K. Gleman, P.E.
Gleman Engineering Company
324 Datura Street
P.O. Box 3384
West Palm Beach, Florida 33402

Dear Mr. Gleman:

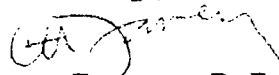
SUBJECT: Air Construction Permits, Nos. AC 05-090952,
-094507: Belcher Oil Company

The department has received your letter of February 1, 1985, in which you, as a representative for Belcher Oil Company, requested a deletion of a specific condition requiring installation of dikes/berms around each affected source. Before taking final action on your request, the bureau will need the following information:

- ° If the affected sources are subject to FAC Rule 17-61, specifically FAC Rule 17-61.04(1), provide compliance to FAC Rule 17-61.05(1) with the department.

If you have any questions, please call Bruce Mitchell, or write to me at the above address.

Sincerely,


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

CHF/BM/rw

cc: Charles M. Collins
Dan E. Dudley

ATTACHMENT 11

GLEMAN ENGINEERING COMPANY **DER**
324 Datura Street
Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402
MAR 11 1985
DAQM

LETTER OF TRANSMITTAL

(305) 655-0506

DATE	March 6, 1985	JOB NO.	84-101-1
ATTENTION	Mr. Bruce Mitchell		
RE:	Belcher Oil Company		
	Port Canaveral		
	Your: AC 05 - 090952		
	and - 094507		

TO Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Fl. 32301-8241

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

- Shop drawings
- Prints
- Plans
- Samples
- Specifications
- Copy of letter
- Change order
- Copy of Form

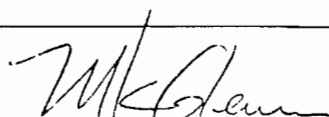
COPIES	DATE	NO.	DESCRIPTION
1	-----	---	DER Stationary Tank Registration/Notification Form

THESE ARE TRANSMITTED as checked below:

- For approval
- For your use
- As requested
- For review and comment
- FOR BIDS DUE _____ 19 _____
- Approved as submitted
- Approved as noted
- Returned for corrections
- _____
- Resubmit _____ copies for approval
- Submit _____ copies for distribution
- Return _____ corrected prints
- PRINTS RETURNED AFTER LOAN TO US

REMARKS This transmittal responds to your February 19, 1985 letter for additional information. The enclosed shows compliance with FAC Rule 17-61.05(1). Please call regarding any need for additional information.

COPY TO Mr. Dan E. Dudley w/o Encl.

SIGNED: 
Michael K. Gleman, P.E.

Department of Environmental Regulation

Stationary Tank Registration/Notification Form

Form 17-1.218(2)

Coastal terminal facilities regulated by the Florida Department of Natural Resources.

BELCHER OIL COMPANY (CAPE CANAVERAL E.
ATT:MOLDENHAUER BX.525500
MIAMI FL 33152

(Make corrections to name and address here)
1. Facility/Addressee name
Belcher Oil Company
Att: D. E. Dudley
Facility address
Cape Canaveral East
Mailing address
P. O. Box 025500
Miami, Florida 33102-5500

FACILITY LOCATION

ADDRESS: NO. 10 TANKER TURN ROAD FL 32920
CITY: CAPE CANAVERAL

Use this form to comply with the following requirements of the Stationary Tank Rule Chapter 17-61, Florida Administrative Code.

- 1 Each owner or operator shall register the following with the department
a All existing facilities by December 31, 1984 (Questions 1-19)
b All new storage systems or facilities at least 10 days prior to the start of installation of tanks except in the case of emergency replacement (Questions 1-19)
c A non-pollutant containing installation which is to be converted to a facility at least 10 days prior to the placement of pollutants in such a facility (Questions 1-19)
2 Each owner or operator shall notify the department of the following
a All storage systems within 10 days of abandonment (Questions 1, 12, 16, 20)
b Facility sale within 10 days of sale. Notice shall be made by the seller (Answer questions 1, 7, and 11. Question 7 about the new owner.)
c Retrofitting within 10 days of completion (Questions 1-19)
3 You may notify the department of a change of operator (Questions 1-6)

12809 Agency Use Only
DNR003300000

PLEASE PRINT OR TYPE

- 2 Facility number (DER will provide this number)
3 Date November 5, 1984
4 Federal Employment Identification (number used to file IRS forms)
5 County Code (see enclosed letter)
6 Operator of facility
Effective date (only for change of operator) Telephone number
7 Company/Person owning tanks and piping
Address
Contact person Telephone number
Effective date (only for change of owner)
8 How many tanks at this location have an individual storage capacity of greater than 550 gallons and store vehicular fuel made from petroleum?
Underground Aboveground
9 Facility location Latitude Longitude Section Township Range
This information is listed on property deeds, and in the offices of the property appraiser and tax assessor
10 Sketch the facility on a separate page showing the APPROXIMATE location of buildings, tanks, and dispensers
A. Draw a line from tank to dispenser to show which are connected by piping
B. Label each tank as Tank 1, Tank 2, etc
C. Write the date and your facility number, if known, or name and address exactly as it appears above
D. Keep a copy of your sketch

REFER TO TANKS BY THESE LABELS IN ANY COMMUNICATION WITH THE DEPARTMENT DESCRIBE PIPING BY THE NUMBER OF THE TANK IT IS ATTACHED TO

11 TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL INFORMATION SUBMITTED ON THIS FORM IS TRUE, ACCURATE, AND COMPLETE

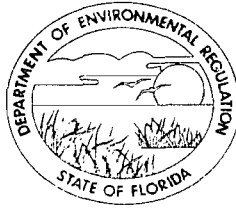
Dan E. Dudley
Name of owner, operator or authorized representative
Signature of owner, operator or authorized representative

KEEP A COPY OF THIS FORM FOR YOUR RECORDS

MAIL TO: DER Stationary Tank Registration
2600 Blair Stone Road
Room 603
Tallahassee, Florida 32301

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

March 26, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Albin W. Smith, President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500

Dear Mr. Smith:

Re: Amendment to the Construction Permit, No. AC 05-090952

The department is in receipt of Mr. Michael K. Gleman's letter with attachment dated March 6, 1985, which was a response to Mr. C. H. Fancy's letter dated February 19, 1985. Due to the response, the bureau is in agreement with Mr. Michael K. Gleman's request contained in his February 1, 1985 letter and the following shall be changed and added:

Specific Condition:

No. 5

From: If not existing, a containment dike/berm shall be erected around the storage tank, Nos. 9, 15, 17 and 18, to contain spills, leaks, etc., to prevent ground-water contamination, and to aid in the clean-up of spills, leaks, etc. and prevent excess odors that could occur from the vaporization of the volatile organic compounds (VOC). If any spills, leaks, etc. occur, the DER's St. Johns River District office shall be promptly notified.

To: If any spills, leaks, etc. occur, the DER's St. Johns River District office shall be promptly notified.

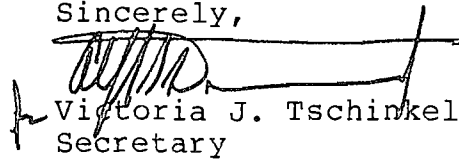
Attachments to be Incorporated:

11. Michael K. Gleman's letter, dated February 1, 1985.
12. C. H. Fancy's letter, dated February 19, 1985.
13. Michael K. Gleman's letter with attachment, dated March 6, 1985.

Mr. Albin W. Smith, President
Page Two
March 26, 1985

This letter must be attached to your construction permit, No. AC 05-090952, and shall become a part of that permit.

Sincerely,



Victoria J. Tschinkel
Secretary

VJT/ks

cc: Michael K. Gleman, Gleman Engineering Company
Dan E. Dudley, Belcher Oil Company
Tom Sawicki, St. Johns River District

ATTACHMENT 11

Best Available Copy

DER
FEB 4 1985
BAQM⁸³²

GLEMAN ENGINEERING COMPANY

324 DATURA STREET

POST OFFICE BOX 3384

WEST PALM BEACH, FLORIDA 33402

TELEPHONE (305) 655-0506

EXPRESS MAIL B62563511
RETURN RECEIPT

February 1, 1985

State of Florida
Department of Environmental Regulation
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Attention: Mr. C.H. Fancy, P.E.
Deputy Chief

RE: Belcher Oil Company
DER Air Permits
Port Canaveral
Your: AC 05-090952, 094507, 0585950
Our: 84-101-1

Gentlemen:

This letter responds to a specific condition contained in the referenced air permits that requires berms around each individual storage tank at the referenced facility. These berms have not been constructed due to inadvertant oversight. Upon discovery of this condition, and in order to respond to the DER's inquiry regarding these berms, we respectfully request that this requirement be deleted and the permits be amended for the following reasons:

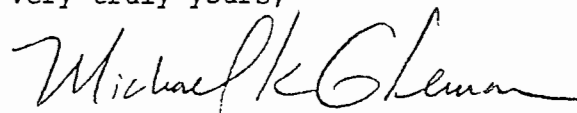
1. It is our feeling that spill containment berms will not significantly reduce air pollution in the event of a product spill. Berms normally contain only minor spills when compared with the catastrophic tank ruptures full sized dikes will contain. Because of this, and the sandy soil conditions at this facility, we feel any minor spill would soak into the surrounding soil before reaching the proposed berms. This would most likely have the effect of the soil "holding" the product while clean-up is being accomplished.
2. This facility has a current SPCC Plan (Spill Prevention Control and Countermeasure Plan) in effect and in accordance with 40 CFR Part 112 to rapidly respond to spills. We feel this spill prevention and clean-up plan in itself would contribute largely to the prevention of air and/or ground-water pollution.

Page Two
February 1, 1985
Mr. C.H. Fancy, P.E.

3. This facility does have major earthen dikes in place as required by fire codes.
4. We are not aware of any other code requirement for berms as specified in the referenced specific condition. We are aware that the new FAC Rule 17-61 does contain provisions and timetables that will require this facility to provide secondary containment.

Because of these reasons, we respectfully request consideration be given to deleting the specific condition for installation of individual berms for each storage tank. We are available to discuss this matter in greater detail at your convenience. Please feel free to call regarding any question.

Very truly yours,



Michael K. Gleman P.E.
President

MKG/kb

CC: Mr. Charles M. Collins, P.E. - DER
Mr. Bruce Mitchell - DER ✓
Mr. Dan E. Dudley - Belcher Oil

ATTACHMENT 12

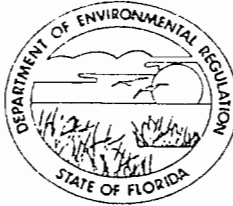
Best Available Copy

GLEMAN/2-14

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

February 19, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael K. Gleman, P.E.
Gleman Engineering Company
324 Datura Street
P.O. Box 3384
West Palm Beach, Florida 33402

Dear Mr. Gleman:

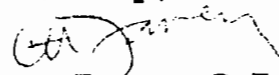
SUBJECT: Air Construction Permits, Nos. AC 05-090952,
-094507: Belcher Oil Company

The department has received your letter of February 1, 1985, in which you, as a representative for Belcher Oil Company, requested a deletion of a specific condition requiring installation of dikes/berms around each affected source. Before taking final action on your request, the bureau will need the following information:

- o If the affected sources are subject to FAC Rule 17-61, specifically FAC Rule 17-61.04(1), provide compliance to FAC Rule 17-61.05(1) with the department.

If you have any questions, please call Bruce Mitchell, or write to me at the above address.

Sincerely,


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

CHF/BM/rw

cc: Charles M. Collins
Dan E. Dudley

ATTACHMENT 13

GLEMAN ENGINEERING COMPANY

324 Datura Street
Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402

(305) 655-0506

DER
MAR 11 1985
LAQM

LETTER OF TRANSMITTAL

TO Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Fl. 32301-8241

DATE	March 6, 1985	JOB NO.	84-101-1
ATTENTION	Mr. Bruce Mitchell		
RE:	Belcher Oil Company		
	Port Canaveral		
	Your: AC 05 - 090952		
	and - 094507		

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

- Shop drawings
- Prints
- Plans
- Samples
- Specifications
- Copy of letter
- Change order
- Copy of Form

COPIES	DATE	NO.	DESCRIPTION
1	-----	---	DER Stationary Tank Registration/Notification Form

THESE ARE TRANSMITTED as checked below:

- For approval
- For your use
- As requested
- For review and comment
- FOR BIDS DUE _____ 19 _____
- Approved as submitted
- Approved as noted
- Returned for corrections
- Resubmit _____ copies for approval
- Submit _____ copies for distribution
- Return _____ corrected prints
- PRINTS RETURNED AFTER LOAN TO US

REMARKS This transmittal responds to your February 19, 1985 letter for additional information. The enclosed shows compliance with FAC Rule 17-61.05(1). Please call regarding any need for additional information.

COPY TO Mr. Dan E. Dudley w/o Encl.

SIGNED: 
Michael K. Gleman, P.E.

Department of Environmental Regulation

Stationary Tank Registration/Notification Form

Form 17-1.218(2)

Coastal terminal facilities regulated by the Florida Department of Natural Resources.

BELCHER OIL COMPANY (CAPE CANAVERAL E.
ATT:MOLDENHAUER BX.525500
MIAMI FL 33152

(Make corrections to name and address here)

1. Facility/Addressee name Belcher Oil Company
Att: D. E. Dudley
 Facility address Cape Canaveral East
 Mailing address P. O. Box 025500
Miami, Florida 33102-5500

FACILITY LOCATION

ADDRESS: NO. 10 TANKER TURN ROAD
CITY: CAPE CANAVERAL FL 32920

Use this form to comply with the following requirements of the Stationary Tank Rule Chapter 17-61, Florida Administrative Code.

- Each owner or operator shall register the following with the department:
 - All existing facilities by December 31, 1984 (Questions 1-19)
 - All new storage systems or facilities at least 10 days prior to the start of installation of tanks except in the case of emergency replacement (Questions 1-19)
 - A non-pollutant containing installation which is to be converted to a facility at least 10 days prior to the placement of pollutants in such a facility (Questions 1-19)
- Each owner or operator shall notify the department of the following:
 - All storage systems within 10 days of abandonment (Questions 1, 12, 16, 20)
 - Facility sale within 10 days of sale. Notice shall be made by the seller. (Answer questions 1, 7, and 11. Question 7 about the new owner.)
 - Retrofitting within 10 days of completion (Questions 1-19)
- You may notify the department of a change of operator. (Questions 1-6)

12809 Agency Use Only

DNR003300000

PLEASE PRINT OR TYPE

- 2 Facility number (DER will provide this number) _____ 3 Date November 5, 1984
- 4 Federal Employment Identification (number used to file IRS forms) _____
- 5 County Code (see enclosed letter) _____
- 6 Operator of facility _____
 Effective date (only for change of operator) _____ Telephone number (____) _____
- 7 Company/Person owning tanks and piping _____
 Address _____
 Contact person _____ Telephone number (____) _____
 Effective date (only for change of owner) _____
- 8 How many tanks at this location have an individual storage capacity of greater than 550 gallons and store vehicular fuel made from petroleum?
 _____ Underground _____ Aboveground _____
- 9 Facility location Latitude _____ Longitude _____ Section _____ Township _____ Range _____
 This information is listed on property deeds, and in the offices of the property appraiser and tax assessor.
- 10 Sketch the facility on a separate page showing the APPROXIMATE location of buildings, tanks, and dispensers
 A. Draw a line from tank to dispenser to show which are connected by piping
 B. Label each tank as Tank 1, Tank 2, etc.
 C. Write the date and your facility number, if known, or name and address exactly as it appears above
 D. Keep a copy of your sketch.

REFER TO TANKS BY THESE LABELS IN ANY COMMUNICATION WITH THE DEPARTMENT DESCRIBE PIPING BY THE NUMBER OF THE TANK IT IS ATTACHED TO

11 TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL INFORMATION SUBMITTED ON THIS FORM IS TRUE, ACCURATE, AND COMPLETE

Dan E. Dudley
Name of owner, operator or authorized representative

[Signature]
Signature of owner, operator or authorized representative

KEEP A COPY OF THIS FORM FOR YOUR RECORDS

MAIL TO: DER Stationary Tank Registration
2600 Blair Stone Road
Room 603
Tallahassee, Florida 32301

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

December 20, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Albin W. Smith
President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500

Dear Mr. Smith:

Enclosed are Permit Numbers AC 05-092822, AC 05-090952, AC 05-094507, dated December 18, 1984, to Belcher Oil Company-Port Canaveral issued pursuant to Section 403, Florida Statutes.

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

Sincerely,

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

CHF/pa

Enclosure

cc: Michael K. Gleman, P.E., Gleman Engineering
Tom Sawicki, DER St. Johns River District

Final Determination

Belcher Oil Company-Port Canaveral
Brevard County
Cape Canaveral, Florida

Permit Numbers:

AC 05-090952

AC 05-092822

AC 05-094507

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

December 17, 1984

Response to Public Comment

Belcher Oil Company - Port Canaveral

Cape Canaveral, Florida

The applications to modify existing sources at the bulk gasoline and petroleum storage/transfer facility have been reviewed by the Department. Public notice of the Department's Intent to Issue was published in the Today Newspaper on November 9, 1984. Copies of the technical evaluation and preliminary determination were available for public inspection at the Department's St. Johns River District office and the Bureau of Air Quality Management.

Comments were received on behalf of the applicant in a letter by Mr. Michael K. Gleman, consultant for the applicant. Since the comments only reflect additional petroleum product dispensers, one at the North Loading Rack and one at the South Loading Rack - A, with no increase of throughput and pollutant emissions, Tables 4 and 5 of the preliminary determination and Specific Condition No. 9 of AC 05-092822 will be revised to reflect the actual dispensers.

Attachment to be incorporated is:

9. Michael K. Gleman's letter, dated November 9, 1984.

It is recommended that the construction permits be issued as drafted, with the above revisions and Attachment incorporated.

CAPE PUBLICATIONS, INC.

The Times

Published Weekly on Wednesday

THE TRIBUNE

Published Weekly on Wednesday

TODAY

Published Daily

STAR-ADVOCATE

Published Weekly on Wednesday

STATE OF FLORIDA
COUNTY OF BREVARD

Before the undersigned authority personally appeared Linda L. Spicer
who on oath says that he/she is Legal Advertising Clerk
of the TODAY, a newspaper published in Brevard County,
Florida; that the attached copy of advertising being a
Notice of Application for permit
in the matter of
to the Belcher Oil Company
in the Court

was published in the TODAY NEWSPAPER
in the issues of Novmeber 9, 1984

Affiant further says that the said TODAY is a newspaper
published in said Brevard County, Florida and that the said newspaper has
heretofore been continuously published in said Brevard County, Florida
regularly as stated above, and has been entered as second class mail matter at
the post office in COCOA, said Brevard County, Florida for a period of
one year next preceding the first publication of the attached copy of ad-
vertisement; and affiant further says that he 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 said newspaper.

Linda L. Spicer

Sworn and subscribed to before me this
9th November 84
day of A.D., 19

Matic & Kiehl

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXPIRES SEPT 14 1987
B LINDEN THIRD GENERAL INSURANCE UND

State of Florida
Department of
Environmental Regulation
Notice of Proposed Agency
Action of Permit Applications
The Department of Environ-
mental Regulation gives notice of
its intent to issue permits to the
Belcher Oil Company - Part Ca-
noveral to modify five petroleum
storage tanks and the south load-
ing rack-vapor recovery system
and to decommission one pe-
troleum storage tank at its exist-
ing bulk gasoline and petroleum
storage/transfer facility in Cape
Canoveral, Brevard County,
Florida. A determination of best
available control technology
(BACT) was not required.
Persons whose substantial in-
terests are affected by the De-
partment's proposed permitting
decision may petition for an ad-
ministrative proceeding (hear-
ing) in accordance with Section
120.57, Florida Statutes. The peti-
tion must conform to the require-
ments of Chapters 17-103 and 28-5,
Florida Administrative Code,
and 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 (business) days
of publication of this notice. Fail-
ure to file a request for hearing
within this time period shall con-
stitute a waiver of any right
such person may have to request
an administrative determination
(hearing) under Section 120.57,
Florida Statutes.
If a petition is filed, the admin-
istrative hearing process is de-
signed to formulate agency ac-
tion. Accordingly, the Depart-
ment's final action may be differ-
ent from the position taken by it
in this preliminary statement.
Therefore, persons who may not
object to the proposed agency ac-
tion may wish to intervene in the
proceeding. A petition for inter-
vention must be filed pursuant to
Model Rule 70-5.207 at least five
(5) days before the final hearing
and be filed with the hearing offi-
cer if one has been assigned of
the Division of Administrative
Hearings, Department of Admin-
istrative, 2009 Apalachee Park-
way, Tallahassee, Florida 32301.
If no hearing officer has been as-
signed, the petition is to be filed
with the Department's Office of
General Counsel, 2600 Blair Stone
Road, Tallahassee, Florida 32301.
Failure to petition to intervene
within the allowed time frame
constitutes a waiver of any right
such person has to request a
hearing under Section 120.57,
Florida Statutes.
The application is available for
public inspection during normal
business hours, 8:00 a.m. to 5:00
p.m., Monday through Friday,
except legal holidays, at:
Dept. of Environmental
Regulation
St. Johns River District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803
Dept. of Environmental
Regulation
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301
Any person may send written
comments on the proposed action
to Mr. Bill Thomas at the depart-
ment's Tallahassee address. All
comments mailed within 30 days
of the publication of this notice
will be considered in the depart-
ment's final determination.
T071598-1T-11/9, 1984, Fri.

Table 4

Source	Potential VOC Emissions (lbs/yr)			
	Breathing/ Standing	Working/ Withdrawal	Loading Racks	Total
PST ¹				
#1	1,620	781		2,401
#2	57	4		61
#3	906	121		1,027
#4 ²	--	--		--
#5 ²	--	--		--
#6 ²	--	--		--
#7	1,226	954		2,180
#8	0	0		0
#9	1,195	43		1,238
#10 ³	2,486	232		2,718
#11 ³	2,486	232		2,718
#12	235	88		323
#13	235	88		323
#14 ²	--	--		--
#15	42,537	54		42,591
#17	2,136	69		2,205
#18	2,136	69		2,205
NLR ⁴ : Dispensers	2 Diesel		373.0	
	1 No. 6 Fuel Oil		2.5	708.8
	1 Jet Kerosene		61.8	
	1 RC-70		271.5	
	1 AC-20		0.0	
SLR-VRS ⁵ : Dispensers	4 Gasoline		44,159.1	
	2 Diesel		248.1	44,465.2
	1 Jet Kerosene		15.4	
	2 Ethanol		42.6	
Facility Totals				
lbs/yr	57,255.0	2,735.0	45,174.0	105,164.0
TPY	28.6	1.4	22.6	52.6

- There is no PST No. 16; PST No. 8 has been decommissioned.
- Emissions were not calculated for AC-20 asphalt due to extremely low vapor pressure.
- RC-70 product: 70% asphalt, 30% naphtha; emissions were calculated using product characteristics of naphtha.
- Product throughput in barrels/yr:

Diesel	487,000
No. 6 Fuel Oil	366,000
Jet Kerosene	67,200
RC-70	12,000

Assume: 34,000 gallons of petroleum product can be loaded per dispenser per hour.
- Product throughput in barrels/yr:

Gasoline	3,600,000
Diesel	324,000
Jet Kerosene	16,800
Ethanol	71,429

Assume: 1) 34,000 gallons of petroleum product can be loaded per dispenser per hour; and
2) Efficiency of the VRS is 98% removal of pollutant (vendor specifications).

Table 5

<u>Source</u>	<u>Allowable VOC Emission Rate</u>
SLR-VRS	35 milligrams total organic compounds per liter of gasoline loaded

Note: The SLR consists of two sections, "A" and "B", which contain the following dispensing connections, type of products dispensed, and projected annual emissions:

<u>SLR-A</u>	<u>SLR-B</u>	<u>Projected Annual VOC Emissions</u>
2 Gasoline	2 Gasoline	44,159.1 lbs/yr (total)
1 Diesel	1 Diesel	248.1 lbs/yr (total)
1 Jet Kerosene		15.4 lbs/yr
1 Ethanol	1 Ethanol	42.6 lbs/yr

ATTACHMENT 9

"See Original"
- In the file -

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: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-092822
Expiration Date: June 1, 1985
County: Brevard
Latitude/Longitude: 28° 24' 20" N/80° 36' 09" W
Section/Township/Range:
Project: Modification of the South Loading Rack (4 Gasoline, 2 Diesel, 1 Jet Kerosene and 1 Ethanol dispenser(s)) and its Vapor Recovery System

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 a modification to allow an increase in the allowable VOC emission rate from the existing South Loading Rack (SLR; 4 Gasoline, 2 Diesel (No. 2 Fuel Oil), 1 Jet Kerosene and 1 Ethanol dispenser(s)) and its vapor recovery system (VRS) that services the SLR during gasoline loading operations. The maximum allowable emission rate from the SLR-VRS shall be 35 milligrams total organic compounds per liter of gasoline loaded. The UTM coordinates are Zone 17-589.9 km East and 3142.0 km North.

The modification shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on pages 4 and 5 of the "Specific Conditions."

Attachments are as follows:

1. Construction permit No. AC 05-57480 and its attachments, modifications and amendments.
2. Michael K. Gleman's letter with attachments dated April 26, 1984.
3. Albin W. Smith's letter with attachments dated June 21, 1984.
4. Steve Smallwood's letter dated August 8, 1984.
5. Michael K. Gleman's letter with DER Form 17-1.202 attached dated September 19, 1984.
6. Michael K. Gleman's letter with attachment dated September 21, 1984.
7. "Waiver of 90 day time limit" dated October 2, 1984, and signed by Albin W. Smith.
8. Michael K. Gleman's letter with attachments dated October 18, 1984.

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-092822
Expiration Date: June 1, 1985

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 therefor 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.
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

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-092822
Expiration Date: June 1, 1985

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

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)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () 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.

PERMITTEE: Belcher Oil Company
 Port Canaveral Bulk Gasoline Terminal
 P. O. Box 525500
 Miami, Florida 33152

Permit/Certification Number: AC 05-092822
 Expiration Date: June 1, 1985

SPECIFIC CONDITIONS:

1. The modification should reasonably conform to the application, plans, documents, and amendments submitted.
2. The applicant should report any delays in the completion of the modification to the DER's St. Johns River District office.
3. Annual hours of operation will be 8760.
4. Objectionable odors shall not be allowed on off-plant property.
5. The maximum allowable VOC emission rate from the vapor recovery system (VRS) servicing the South Loading Rack (SLR) "A" and "B" shall be 35 milligrams total organic compounds per liter of gasoline loaded (9.91 lbs/hr/dispenser and 22.0 TPY-total, based on 2224 hours of proposed gasoline dispensing).
6. The maximum average flow rate allowed from the SLR "A" and "B" combined in any one 24-hour period is 25,850 gals/hr gasoline only and 28,516 gals/hr all products. The maximum gasoline loading rate of the SLR, total of any two loading dispensers, is 68,000 gallons per hour. Total annual gasoline throughput at the SLR shall not exceed 3,600,000 barrels per year (bbls/yr).
7. Compliance with the mass emission rate limitation of Specific Condition No. 5 shall be determined in accordance with the method referred in 17-2.700(6)(c)2.b.(i), FAC (EPA 450/2-77-026, Appendix A). At least 30 days prior to the date of compliance testing, the DER's St. Johns River District office or its designee shall be notified in order to witness the test.
8. During the compliance test, the gasoline loading rate shall be representative of "normal operation" as outlined in the attached EPA test method guideline, EPA 450/2-77-026, Appendix A, section 5-2.
9. Expected petroleum (non-gasoline) throughput of the SLR (5 dispensers) and their projected potential VOC emissions are:

Source	Dispensers/Product Transferred		Throughput	VOC Emissions
			<u>bbls/yr</u>	<u>lbs/yr</u>
SLR	2	Diesel	324,000	248.1
	1	Jet Kerosene	16,800	15.4
	2	Ethanol	71,429	<u>42.6</u>
			Total:	<u>306.1</u>

10. Since the VOC emissions from the petroleum products transferred from the source referenced in #9 are considered to be area-wide (facility) emissions, compliance verification shall be by periodic visual inspections of the equipment used to transfer the petroleum products. The visual inspections shall be conducted by the DER's St. Johns River District office. Any corrective action shall be done with the concurrence of the District office.
11. Annual operating reports shall be submitted to the DER's St. Johns River District office or its designee and shall be due March 1 of each calendar year. This report shall contain records of the gasoline and petroleum (non-gasoline) throughput.

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-092822
Expiration Date: June 1, 1985

SPECIFIC CONDITIONS:

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

Issued this 18 day of December
1984.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



_____ Attachments

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: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-090952
Expiration Date: June 1, 1985
County: Brevard
Latitude/Longitude: 28° 24' 20" N/80° 36' 09" W
Section/Township/Range:
Project: Modification to the existing gasoline storage tanks
Nos. 9, 15, 17 and 18

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 modification to the above referenced sources to allow an increase in their gasoline throughput due to the decommissioning of the existing gasoline storage tank No. 8 and the renovation/conversion of the existing gasoline storage tank No. 7 at the applicant's existing bulk gasoline and petroleum storage/transfer terminal located at No. 10 Tanker Turn Road, Cape Canaveral, Florida. The UTM coordinates are Zone 17-589.9 km East and 3142.0 km North.

The modification shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on page 4 of the "Specific Conditions."

Attachments are as follows:

1. Construction permit No. AC 05-57477 and its attachments, modifications and amendments.
2. Construction permit No. AC 05-57478 and its attachments, modifications and amendments.
3. Construction permit No. AC 05-57479 and its attachments, modifications and amendments.
4. Michael K. Gleman's letter with attachments dated April 26, 1984.
5. Albin W. Smith's letter with attachments dated June 21, 1984.
6. Steve Smallwood's letter dated August 8, 1984.
7. Michael K. Gleman's letter with DER Form 17-1.202 attached dated September 19, 1984.
8. Michael K. Gleman's letter with attachment dated September 21, 1984.
9. "Waiver of 90 day time limit" dated October 2, 1984, and signed by Albin W. Smith.
10. Michael K. Gleman's letter with attachments dated October 18, 1984.

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-090952
Expiration Date: June 1, 1985

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 therefor 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.
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

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-090952
Expiration Date: June 1, 1985

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

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)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - (x) Compliance with New Source Performance Standards: PSI Nos. 17 and 18
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.

PERMITTEE: Belcher Oil Company
 Port Canaveral Bulk Gasoline Terminal
 P. O. Box 525500
 Miami, Florida 33152

Permit/Certification Number: AC 05-090952
 Expiration Date: June 1, 1985

SPECIFIC CONDITIONS:

1. The modification should reasonably conform to the application, plans, documents, and amendments submitted.
2. The applicant should report any delays in the completion of the modification to the DER's St. Johns River District office.
3. Annual hours of operation will be 8760.
4. Objectionable odors shall not be allowed on off-plant property.
5. If not existing, a containment dike/berm shall be erected around each storage tank, Nos. 9, 15, 17 and 18, to contain spills, leaks, etc., to prevent ground-water contamination, and to aid in the clean-up of spills, leaks, etc. and prevent excess odors that could occur from the vaporization of the volatile organic compounds (VOC). If any spills, leaks, etc. occur, the DER's St. Johns River District office shall be promptly notified.
6. Expected gasoline throughput of the petroleum storage tanks (PST), Nos. 9, 15, 17 and 18, and their projected potential VOC emissions are:

Source	Dimensions feet	Capacity barrels	Product Stored	Throughput bbls/yr	VOC Emissions lbs/yr
PST #9	80Ø X 40	35,000	Gasoline	434,491	1,238
#15	100Ø X 40	55,000	Gasoline	682,797	42,591
#17	143Ø X 42	100,000	Gasoline	1,241,356	2,205
#18	143Ø X 42	100,000	Gasoline	1,241,356	2,205
				Total	3,600,000
					48,239

Note: Ø represents the diameter x Height.

7. Since the VOC emissions from the sources referenced in #6 are considered to be area-wide (facility) emissions, compliance verification shall be by periodic visual inspections of the equipment used to store/transfer the petroleum product. The visual inspections shall be conducted by the DER's St. Johns River District office. Any corrective action shall be done with the concurrence of the District office.
8. Annual operating reports shall be submitted to the DER's St. Johns River District office or its designee and shall be due on March 1 of each calendar year. This report shall contain records of the gasoline throughput.
9. The applicant will demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit to the DER's St. Johns River District office prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.

Issued this 18 day of December 1984

STATE OF FLORIDA DEPARTMENT
 OF ENVIRONMENTAL REGULATION

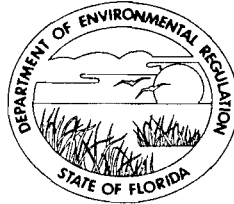
Victoria J. Schall

_____ Attachments

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: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-094507
Expiration Date: December 31, 1985
County: Brevard
Latitude/Longitude: 28° 24' 20" N/80° 36' 09" W
Section/Township/Range:
Project: Renovation/conversion of the existing gasoline storage tank No. 7 to a fixed-roof diesel storage tank (No. 7)

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 renovation/conversion of the existing gasoline storage tank No. 7 to a fixed-roof diesel storage tank at the applicant's existing bulk gasoline and petroleum storage/transfer terminal located at No. 10 Tanker Turn Road, Cape Canaveral, Florida. The UTM coordinates are Zone 17-589.9 km East and 3142.0 km North.

Construction shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on page 4 of the "Specific Conditions."

Attachments are as follows:

1. Construction permit No. AC 05-57476 and its attachments, modifications and amendments.
2. Michael K. Gleman's letter with attachments dated April 26, 1984.
3. Albin W. Smith's letter with attachments dated June 21, 1984.
4. Steve Smallwood's letter dated August 8, 1984.
5. Michael K. Gleman's letter with DER Form 17-1.202 attached dated September 19, 1984.
6. Michael K. Gleman's letter with attachment dated September 21, 1984.
7. "Waiver of 90 day time limit" dated October 2, 1984, and signed by Albin W. Smith.
8. Michael K. Gleman's letter with attachments dated October 18, 1984.

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-094507
Expiration Date: December 31, 1985

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 therefor 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.
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

PERMITTEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-094507
Expiration Date: December 31, 1985

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

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)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () 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.

PERMITEE: Belcher Oil Company
Port Canaveral Bulk Gasoline Terminal
P. O. Box 525500
Miami, Florida 33152

Permit/Certification Number: AC 05-094507
Expiration Date: December 31, 1985

SPECIFIC CONDITIONS:

1. Construction/installation should reasonably conform to the application, plans, documents, and amendments submitted.
2. The applicant should report any delays in the completion of the modification to the DER's St. Johns River District office.
3. Annual hours of operation will be 8760.
4. Objectionable odors shall not be allowed on off-plant property.
5. If not existing, a containment dike/berm shall be erected around the storage tank No. 7 to contain spills, leaks, etc., to prevent ground-water contamination, and to aid in the clean-up of spills, leaks, etc. and prevent excess odors that could occur from the vaporization of the volatile organic compounds (VOC). If any spills, leaks, etc. occur, the DER's St. Johns River District office shall be promptly notified.

6. Expected diesel throughput of the petroleum storage tank (PST) No. 7 and the projected potential VOC emissions are:

Source	Dimensions <u>feet</u>	Capacity <u>barrels</u>	Product Stored	Throughput <u>bbls/yr</u>	VOC Emissions <u>lbs/yr</u>
PST #7	100Ø X 40	55,000	Diesel	811,000	2,180

Note: Ø represents the diameter x Height.

7. Since the VOC emissions from the source referenced in #6 are considered to be area-wide (facility) emissions, compliance verification shall be by periodic visual inspections of the equipment used to store/transfer the petroleum product. The visual inspections shall be conducted by the DER's St. Johns River District office. Any corrective action shall be done with the concurrence of the District office.

Annual operating reports shall be submitted to the DER's St. Johns River District office or its designee and shall be due on March 1 of each calendar year. This report shall contain records of the gasoline throughput.

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

Issued this 18 day of December 1987

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Attachments

Technical Evaluation
and
Preliminary Determination

Belcher Oil Company - Port Everglades
Broward County, Florida

Permit Number:
AC 06-85700

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

August 6, 1984

I. PROJECT DESCRIPTION

A. Applicant

Belcher Oil Company
Port Everglades
2401 Eisenhower Blvd.
Ft. Lauderdale, Florida 33152

B. Project and Location

The applicant intends to construct two new 10,000 barrel gasoline storage tanks (PM 12 and PM 13 : facility ID) and to modify four existing petroleum storage tanks (PM 5, 6, 8, and 11 : facility ID) to accommodate gasoline at its existing facility in Ft. Lauderdale, Broward County, Florida.

The existing facility is located at the above address with UTM coordinates of Zone 17-587.3 km East and 2886.3 km North. The existing bulk gasoline terminal is a major emitting facility for the pollutant VOC (volatile organic compounds) and is located in a nonattainment area for ozone.

C. Process and Controls

Currently, PM 5, 6, 8, and 11 are permitted to store petroleum products with vapor pressures less than 1.5 psia and have the following capacities and construction dates:

<u>Storage Tank</u>	<u>Capacity (Barrels)</u>	<u>Date Constructed</u>
o PM 5	95,874	1940
o PM 6	96,133	1940
o PM 8	96,033	1941
o PM 11	96,017	1941

Each tank has a fixed roof and will be retrofitted with an internal floating pan in order to accommodate the handling of automotive gasoline. Each internal floating type cover shall be equipped with a continuous closure device between the tank wall and the cover edge. The closure device will consist of a liquid-mounted resilient primary seal and a rim-mounted secondary seal.

The two new proposed 10,000 barrel gasoline storage tanks will be fixed roof type with internal pans and equipped with a closure device between the tank wall and the cover edge. The closure device will consist of a liquid-mounted resilient primary seal and a rim-mounted secondary seal.

II. RULE APPLICABILITY

The only criteria pollutants emitted from the proposed project are classified as volatile organic compounds (VOC) by definition in accordance with FAC Rule 17-2.100(179).

The existing facility is a major facility in accordance with FAC Rule 17-2.100(98). The facility is located in Broward County, which is designated as a nonattainment area for ozone in accordance with FAC Rule 17-2.410(c). Volatile organic compounds are precursors to ozone and the proposed emissions were examined in accordance with FAC Rule 17-2.510, New Source Review for Nonattainment Areas.

The total projected potential VOC emissions from the proposed new and modified sources are 2.49 tons per year (TPY) and review will be in accordance with FAC Rule 17-2.510(2)(d)4., Modifications to Major Facilities. Since the net emissions increase is not greater than the significant level of 40 TPY VOC pursuant to FAC Rule 17-2.510(2)(e)2., the proposed project is exempt from FAC Rule 17-2.510(4), Preconstruction Review Requirements. Therefore, the proposed project will be permitted in accordance with FAC Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration of Nonattainment Requirements.

The Standards of Performance for Storage Vessels for Petroleum Liquids, 40 CFR 60.110a, Subpart Ka, has been adopted by reference, pursuant to FAC Rule 17-2.660, and is applicable to the two 10,000 barrel gasoline storage tanks, PM 12 and 13. Since the construction will be fixed-roof type storage tanks, an internal floating pan shall be required and shall be equipped with a closure device between the tank wall and the cover edge. The closure device will consist of a liquid-mounted resilient primary seal and a rim-mounted secondary seal. Testing requirements, testing procedures and monitoring of operations shall be in accordance with Subpart Ka.

The four existing fixed-roof storage tanks, PM 5, 6, 8, and 11, that are being renovated to accommodate gasoline, are not subject to the provisions of Subpart Ka because there will be a net decrease in VOC emissions from previous operations. Therefore, the referenced tanks shall be permitted in accordance with FAC Rule 17-2.650(1)(f)8., Petroleum Liquid Storage. Testing procedures shall be in accordance with FAC Rules 17-2.650(1)(f)8. and 17-2.700(6)(c)2.a.(ii), EPA Reports-Petroleum Liquid Storage.

III. SUMMARY EMISSIONS AND AIR QUALITY ANALYSIS

A. Emission Limitations

The regulated pollutant emissions from the proposed project are volatile organic compounds. Since there are no mass emission testing requirements contained in the applicable regulations, the following table summarizes the potential VOC emissions projected for the proposed project:

Source Facility ID	VOC Potential Emissions (TPY)		Total loss
	Standing loss ¹	Withdrawal loss ²	
PM 5, 6, 8, and 11	2.01 (total)	0.06 (total)	2.07
PM 12, 13	0.32 (total)	0.095 (total)	0.415

^{1,2} Calculated using AP-42 equations and tables in Section 4.3-Storage of Organic Liquids : Specifically : Sections 4.3.2.3.1., 4.3.2.3.2., and 4.3.2.3.3.

The permitted VOC emissions are in compliance with all applicable requirements of FAC Chapter 17-2 and the New Source Performance Standards (NSPS), 40 CFR 60, Subpart Ka, which has been adopted by reference in FAC Chapter 17-2.

B. Air Quality Impacts

An air quality analysis is not necessary under the applicable regulations for the proposed project.

IV. CONCLUSION

The projected VOC emissions of 2.49 tons per year from the proposed project should not cause any violation of Florida's ambient air quality standards. Proper maintenance of the equipment should assure minimum VOC emissions from the gasoline storage tanks, PM 5, 6, 8, 11, 12 and 13.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of FAC Chapter 17-2 and the NSPS, 40 CFR 60, Subpart Ka.

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: Belcher Oil Company Permit Number: AC 06-85700
Port Everglades Bulk Gasoline Expiration Date: July 31, 1985
Terminal County: Broward
P. O. Box 525500 Latitude/Longitude: 26° 05' 40" N/
Ft. Lauderdale, Florida 33152 80° 07' 39" W
Project: Construction of two 10,000
barrel gasoline storage tanks
(PM 12 & 13); Modify 4 existing
storage tanks to accommodate
gasoline (PM, 5, 6, 8 & 11)

This permit is issued under the provisions of Chapter(s) 403
17-2 and 17-4, 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 construction of two new 10,000 barrel gasoline storage tanks
(PM 12 & 13), which will have fixed roofs and equipped with a
closure device between the tank wall and the cover edge. The
closure device will consist of a liquid-mounted resilient primary
seal and a rim-mounted secondary seal.

For the modification of four existing petroleum storage tanks (PM 5,
6, 8, and 11) to accommodate gasoline. The existing fixed-roof
tanks will be retrofitted with internal floating pans equipped with
a continuous closure device between the tank wall and the cover
edge. The closure device will consist of a liquid-mounted resilient
primary seal and a rim-mounted secondary seal.

Construction shall be in accordance with the permit application and
plan, documents, amendments, and drawings except as otherwise noted
on pages 5-7 of the "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form
17-1.202(1).
2. C. H. Fancy's letter dated May 11, 1984.
3. M. K. Gleman's letter dated June 8, 1984.
4. C. H. Fancy's letter dated June 27, 1984.
5. Tom Tittle's memo dated July 2, 1984.
6. M. K. Gleman's letter dated July 11, 1984.
7. M. K. Gleman's letter dated July 16, 1984.

PERMITTEE: Belcher Oil Company

I. D. Number:

Permit Number: AC 06-85700

Expiration Date: July 31, 1985

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.

PERMITTEE: Belcher Oil Company

I. D. Number:

Permit Number: AC 06-85700

Expiration Date: July 31, 1985

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: Belcher Oil Company I. D. Number:
Permit Number: AC 06-85700
Expiration Date: July 31, 1985

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: For the storage tanks:
PM 12 and 13

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- (x) 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: Belcher Oil Company

I. D. Number:

Permit Number: AC 06-85700

Expiration Date: July 31, 1985

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:

A. PM 12 and 13:

1. These storage tanks are subject to the provisions of the NSPS, 40 CFR 60, Subpart Ka.
2. The fixed-roof storage tanks shall have an internal floating pan equipped with a closure device between the tank wall and the cover edge. The closure device shall consist of a liquid-mounted resilient primary seal and a rim-mounted secondary seal.
3. Testing, testing procedures and monitoring requirements shall be in accordance with the NSPS, 40 CFR 60, Subpart Ka.

PERMITTEE: Belcher Oil Company

I. D. Number:

Permit Number: AC 06-85700

Expiration Date: July 31, 1985

SPECIFIC CONDITIONS:

B. PM 5, 6, 8, and 11:

1. These storage tanks are subject to the provisions of FAC Rule 17-2.650(1)(f)8.
2. Each fixed-roof storage tank shall be retrofitted with an internal floating pan equipped with a closure seal, or seals, to close the space between the roof edge and the tank wall, or the sources shall be retrofitted with an equally effective alternative control. The closure device selected by the applicant is a liquid-mounted resilient primary seal and a rim-mounted secondary seal.
3. Each storage tank shall be maintained such that there are no visible holes, tears, or other openings in the seals or any seal fabric or materials.
4. All openings, except stub drains are to be equipped with covers, lids, or seals, such that:
 - o the cover, lid, or seal is in the closed position at all times except on demand for sampling, maintenance, repair, or necessary operational practices; and,
 - o automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and,
 - o rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
5. Compliance verification shall be in accordance with FAC Rule 17-2.700(6)(c)2.a.(ii).
6. Permitted storage capacities for each tank are:
 - o PM 5 - 95,874 barrels
 - o PM 6 - 96,133 barrels
 - o PM 8 - 96,003 barrels
 - o PM 11 - 96,017 barrels

C. PM 5, 6, 8, 11, 12, and 13:

1. Reports and compliance verification shall be coordinated with the DER Southeast Florida District Office or its designee. At least 30 days prior notice shall be required.

PERMITTEE: Belcher Oil Co.

I.D. Number:

Permit Number: AC 06-85700

Expiration Date: July 31, 1985

SPECIFIC CONDITIONS:

2. Prior to 90 days before the expiration date of this permit, a complete application for an operating permit and compliance test results shall be submitted to the DER Southeast Florida District Office or its designee. Full operation of the sources may then be conducted in compliance with the terms of this permit until the expiration date contained in this permit or receipt of an operating permit.

Issued this ____ day of _____, 1984

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

ATTACHMENT 1

Belcher

April 13, 1984

Mr. Bruce Mitchell
Bureau of Air Quality
Department of Environmental Regulation
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

DER
APR 16 1984
BAQM

Dear Mr. Mitchell:

Belcher Oil Company presently operates a petroleum storage/transfer terminal at Port Everglades Florida, located as shown in Figure 1 (attached). Presently the air pollution source permits AO-06-47127 and AO-06-69488 are in effect for the facility operations.

Belcher proposes to modify four existing petroleum storage tanks with internal pans and construct two new 10,000 barrel tanks for gasoline handling. The following data estimates the air emissions resulting from present product handling and emissions anticipated from future operations of the equipment. The loading losses for gasoline are already permitted in permit AO-06-69488. The emissions resulting from present operations are estimated at 4.48 short tons per year while the emissions from future product handling are estimated at 2.49 short tons per year. The net decrease will be 1.99 short tons per year.

If there are any questions or if any additional data is needed feel free to contact me at (305) 551-5443.

Sincerely,

Troy W. Dalton / TLG
Troy W. Dalton
Manager Engineering Services

TWD:bc
Attachment

cc: I. Goldman, DER, West Palm Beach
Broward County Environmental Quality
Control Board

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

AC 06-85700

3/15/84

SOUTHEAST FLORIDA
DISTRICT

3301 GUN CLUB ROAD
P.O. BOX 3850
WEST PALM BEACH, FLORIDA 33402



DER

APR 16 1984

BAOM

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ROY DUKE
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Petroleum Storage Facility New Existing

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: Belcher Oil Company COUNTY: Broward

Identify the specific emission point source(s) addressed in this application (i.e. Line
Kila No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Existing tanks and 2
new tanks.

SOURCE LOCATION: Street 2401 Eisenhower Boulevard City Ft. Lauderdale

UTM: East 58723 KM North 2886.3 KM

Latitude 26° 05' 40" N Longitude 80° 07' 39" W

APPLICANT NAME AND TITLE: Belcher Oil Company c/o Troy Dalton, Mgr. Engineering
Services

APPLICANT ADDRESS: P. O. BOX 025500 Miami, Fla. 33102-5500

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Belcher Oil Company

I certify that the statements made in this application for Modification/
Construction 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: Albin K. Smith

Albin Smith, President
Name and Title (Please Type)

Date: 3/15/84 Telephone No. (305) 551-5200

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

1 See Florida Administrative Code Rule 17-2.100(57) and (104)

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.

M. K. Gleman
4/12/84

Signed *Michael K. Gleman*
 Michael K. Gleman, P.E.
 Name (Please Type)
 GLEMAN ENGINEERING COMPANY
 324 Datura Street
 Company Name (Please Type)
 P.O. Box 3384
 West Palm Beach, FL 33402
 Mailing Address (Please Type)

Florida Registration No. 23175 Date: 4/12/84 Telephone No. (305) 655-0506

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.

The project involves retro fitting (4) petroleum storage tanks with internal floating pans for the handling of automotive gasoline. In addition two new 10,000 barrel tanks will be added.

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

Start of Construction _____ Completion of Construction _____

C. Costs of pollution control system(s): (Notes: 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.)

Internal Floating Pans	PM 5	\$48,000.
"	PM 6	48,000.
"	PM 11	48,000.
"	PM 12	22,000.
"	PM 13	22,000.
		\$236,000.

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

AO-06-47127 11/31/81 11/13/86

AO-06-69488

E. Requested permitted equipment operating times: hrs/day 24; days/wk 7; wks/yr 52;
if power plant, hrs/yr _____; if seasonal, describes: _____

Storage Tanks

F. 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? YES
 - a. If yes, has "offset" been applied? N/A
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A
 - c. If yes, list non-attainment pollutants. V.O.C.
 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. NO
 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement 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
- Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? YES
- a. If yes, for what pollutants? VOC
 - b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation 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): _____

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
VOC EXISTING		4.48	Good Practice				
VOC FUTURE		2.49	With F.A.C				
NET DECREASE		1.99	Chapter 17-2				
See calculations per AP-42 attached.							

See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

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

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels N/A

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum N/A

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

N/A

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

Stack Height: _____ ft. Stack Diameter: _____ ft.
 Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.
 Water Vapor Contents: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION Not Applicable

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.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

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

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr.

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 devices: 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.): _____

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
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. Not Applicable
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
(See attached calculations taken from AP-42 Supplement #12)
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, design pressure drop, 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 8 1/2" 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 Figure 2
7. An 8 1/2" 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 roadway (Example: Copy of relevant portion of USGS topographic map).
See Figure 2
8. An 8 1/2" 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 Figure 1

9. The appropriate application fee in accordance with Rule 17-4.05. 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 Not Applicable

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:

*Explain method of determining

5. Useful Lives

6. Operating Costs

7. Energy

8. Maintenance Cost

9. Emissions

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

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:¹
 - d. Capital Cost:
 - e. Useful Life:
 - f. Operating Cost:
 - g. Energy:²
 - 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:¹
 - d. Capital Cost:
 - e. Useful Life:
 - f. Operating Cost:
 - g. Energy:²
 - h. Maintenance Cost:
 - i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWHP design rate.

j. Applicability to manufacturing processes:

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

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant 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 _____ () SO₂* _____ 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.

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

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

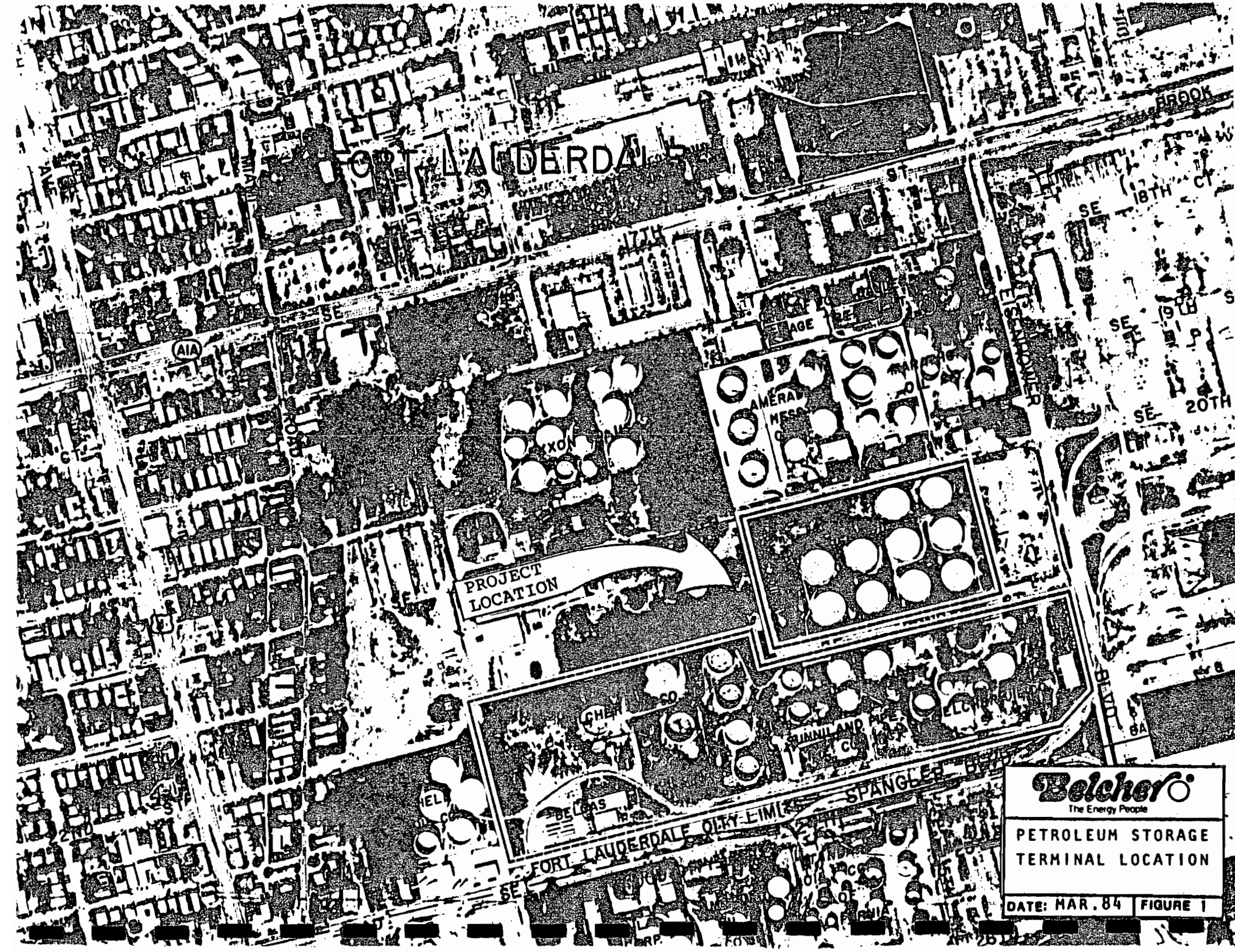
E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of 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.

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.



FORT LAUDERDALE

(A1A)

PROJECT LOCATION

AMERAN MESA

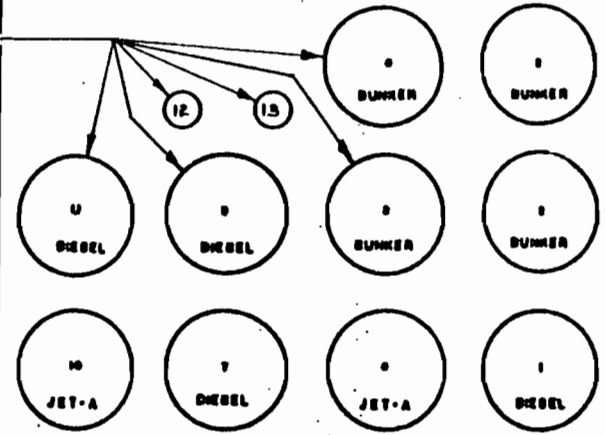
CHEM CO

FORT LAUDERDALE CITY-EMIL

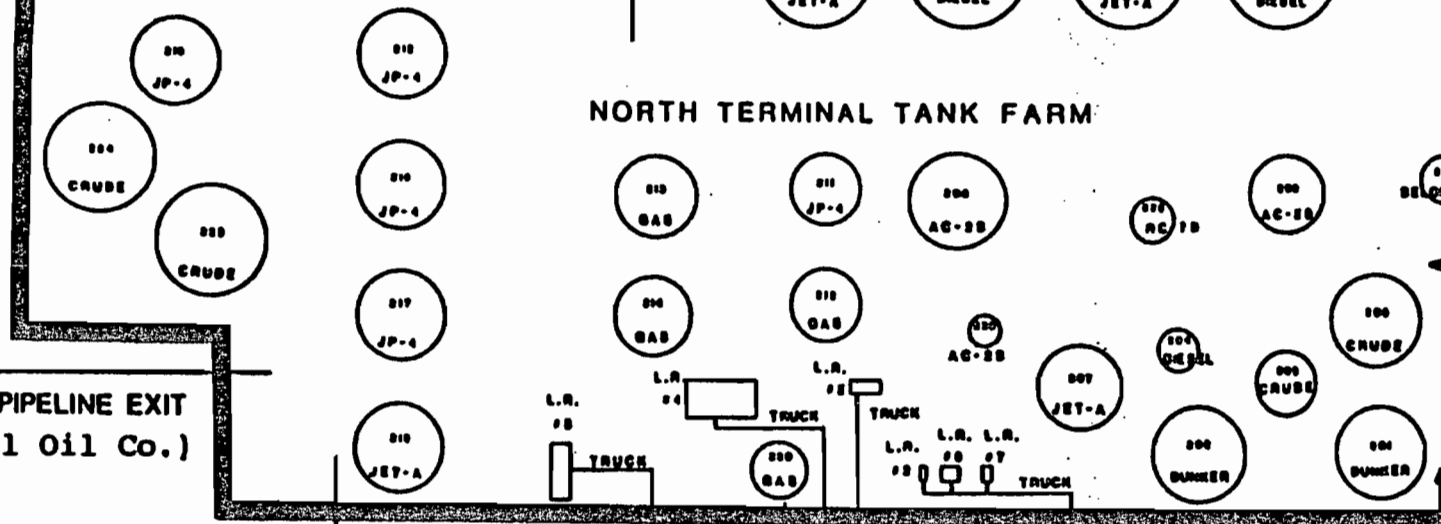
Belcher
The Energy People
PETROLEUM STORAGE
TERMINAL LOCATION
DATE: MAR. 84 | FIGURE 1

TANKS NOS. 5,6,8,11,12,13
TO HAVE INTERNAL FLOATING
PANS INSTALLED AND
TO BE USED FOR GASOLINE
SERVICE.

P. M. TERMINAL TANK FARM



NORTH TERMINAL TANK FARM



LIQUID WASTE TO TRUCK

INPUT/OUTPUT
PIPELINE TO SHIPS

I/O PIPELINE

PIPELINE EXIT
(Shell Oil Co.)

PIPELINE EXIT
(Shell Oil Co.
Everglades Pipeline)

PIPELINE EXIT
(Sunniland Pipe Line Co.
Shell Oil Co.
Standard Oil Co.)

I/O PIPELINE

O/I
PIPELINE



**FACILITY FLOW DIAGRAM
AND AIRBORNE EMISSION
SOURCES**

DATE: MAR. 84 | FIGURE 2

GLEMAN ENGINEERING COMPANY

Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402
(305) 655-0506

JOB 24-101-1
SHEET NO. 1 OF 7
CALCULATED BY MKG DATE APR '82
CHECKED BY _____ DATE _____
SCALE PORT EVERGLADES - BELCHER OIL

EMISSION CALCULATIONS

FOR

CONVERSION OF TANKS PM-5-6-8-11 TO GASOLINE STORAGE AND THE ADDITION OF 2 NEW GASOLINE ROUNDOWN TANKS.

- 1. CURRENT EMISSIONS FROM TANKS
PM-5-6-8-11 STORING BUNKER "C"
AND DIESEL FUEL.
FIXED CONE ROOF TANKS →

4.48 T/YR
SEE ATTACHED
CALCULATIONS

- 2. FUTURE EMISSIONS FROM CONVERTED
TANKS PM-5-6-8-11 AND NEW
ROUNDOWN TANKS #1 & 2 STORING
GASOLINE.
FIXED CONE ROOF TANKS WITH
INTERNAL FLOATING ROOFS

2.49 T/YR
SEE ATTACHED
CALCULATIONS

- 3. NET EMISSION DECREASE →

FUTURE	2.49
CURRENT	4.48
	<u>- 1.99 T/YR</u>

NOTE: ALL CALCULATIONS ARE PER AP-42.

4. STANDING STORAGE LOSSES
FOR
GASOLINE STORAGE

FOR RUNDOWN TANK #1 :

$$L_s = K_s V^N P^* D M_v K_c E_F$$

$$M_v = 62$$

$$V = 8.8$$

$$T = 80^\circ F$$

$$P^* = .27$$

$$P = 9.9$$

$$K_c = 1.0$$

$$D = 45'$$

$$E_F = .25$$

$$N = 0.4$$

$$L_s = \langle 0.7 \rangle \langle 8.8 \rangle^{0.4} \langle .27 \rangle \langle 45 \rangle \langle 62 \rangle \langle 1.0 \rangle \langle .25 \rangle$$

$$= 315 \text{ lbs/YR}$$

$$= .16 \text{ T/YR}$$

FOR RUNDOWN TANK #2 : \Rightarrow IDENTICAL TO TANK #1 = .16 T/YR

FOR TANKS PM-5-6-8-11 :

$$L_s = 4 \left[\langle 0.7 \rangle \langle 8.8 \rangle^{0.4} \langle .27 \rangle \langle 144 \rangle \langle 62 \rangle \langle 1.0 \rangle \langle .25 \rangle \right]$$

$$= 4 \left[1007 \right] = 4028 \text{ lbs/YR} = 2.01 \text{ T/YR}$$

$$\therefore \text{TOTAL } L_s = \begin{array}{r} 0.16 \\ 0.16 \\ 2.01 \\ \hline 2.33 \text{ T/YR} \end{array}$$

GLEMAN ENGINEERING COMPANY

Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402
(305) 655-0506

JOB 84-101-1
SHEET NO. 3 OF 7
CALCULATED BY MKG DATE APR '84
CHECKED BY _____ DATE _____
SCALE PORT EVERGLADES - BELCHER OIL

5.

WITHDRAWAL LOSSES
FOR
GASOLINE STORAGE

FOR RUNDOWN TANKS # 1 + 2 :

$$L_w = \frac{\langle 0.943 \rangle Q C W_b \langle 2 \rangle}{D}$$

Q = 540,000 BBLs/YR

C = .0015

W_b = 5.6

D = 45 Ft.

$$L_w = \left[\frac{\langle 0.943 \rangle \langle 540,000 \rangle \langle .0015 \rangle \langle 5.6 \rangle \langle 2 \rangle}{45} \right]$$

L_w = 190 lbs/YR = 0.095 T/YR.

FOR TANKS PM-5-6-8-11

$$L_w = \left[\frac{\langle 0.943 \rangle \langle 545,791.75 \rangle \langle .0015 \rangle \langle 5.6 \rangle \langle 4 \rangle}{144} \right]$$

FOR Q = 545,791.75 BBLs/YR

C = .0015

W_b = 5.6

D = 144 Ft.

L_w = 120.09 lbs/YR = .06 T/YR

∴ TOTAL L_w ALL TANKS =

.095	
.060	
.155	⇒ USE .16

$$\begin{aligned}
 6. \quad \underline{\text{TOTAL LOSSES}} &= L_s + L_w \\
 &= 2.33 + .16 \\
 &= 2.49 \quad \text{T/YR}
 \end{aligned}$$

7. BREATHING LOSSES
FOR
BUNKER "C" AND DIESEL
(EXIST'G CONDITIONS)

FIXED ROOF TANKS WITH #6 OIL AND DIESEL FUEL

$$L_B = \left[2.26 \times 10^{-2} M \left[\frac{P}{14.7 - P} \right]^{0.68} D^{1.73} H^{0.51} \Delta T^{0.50} F_p C K_c \right] \langle 2 \rangle$$

#6 OIL ONLY	M = 190	H = 19.4
	T = 125°	F _p = 1.33
	P = .0004	C = 1.0
	ΔT = 15.7	K _c = 1.0
	D = 144	HEIGHT = 34 Ft.

$$L_B = 875.2 \text{ lbs/YR} = .44 \text{ T/YR FOR \#6 OIL (PM-5-6)}$$

$$L_B = 6,052.6 \text{ lbs/YR} = 3.03 \text{ T/YR FOR DIESEL (PM-8-11)}$$

DIESEL FUEL	M = 130	H = 19.4
	T = 80°	F _p = 1.33
	P = .012	C = 1.0
	ΔT = 15.7	K _c = 1.0
	D = 144	HEIGHT = 34 Ft.

7. CONT.

$$L_B \text{ TOTAL FOR PM-5-6-8-11} = .44 + 3.03$$

$$= \underline{\underline{3.47 \text{ T/YR}}}$$

8.

WORKING LOSSES
FOR
BUNKER "C" AND DIESEL
(EXIST'G CONDITIONS)

FIXED ROOF TANKS WITH #6 OIL AND DIESEL FUEL

$$L_w = 2.40 \times 10^{-2} M P K_N K_c$$

$$M = 190 \text{ FOR \# 6 OIL}$$

$$= 130 \text{ FOR DIESEL}$$

$$P = .0004 \text{ \# 6 OIL}$$

$$= .012 \text{ DIESEL}$$

$$K_N = 1.0$$

$$K_c = 1.0$$

$$L_w = 0.00182 \text{ lbs/1000 GAL. FOR \# 6 OIL}$$

$$= [0.00182 \langle 1,379,980 \text{ BBLs} \rangle \langle 42 \text{ GAL/BBL} \rangle]$$

$$= 105.5 \text{ lbs/YR} = \underline{\underline{.053 \text{ T/YR FOR \# 6 OIL (PM-5-6)}}$$

$$L_w = 0.0374 \text{ lbs/1000 GAL FOR DIESEL}$$

$$= [0.0374 \langle 750,954 \text{ BBLs} \rangle \langle 42 \text{ GAL/BBL} \rangle]$$

$$= 1180.85 \text{ lbs/YR} = \underline{\underline{.59 \text{ T/YR FOR DIESEL (PM-8-11)}}$$

8. CONT.

$$L_w \text{ TOTAL FOR PM-5-6-S-11} = .053 + .59$$

$$= \underline{\underline{.643 \text{ T/YR}}}$$

9.

LOADING LOSSES
FOR
BUNKER "C" AND DIESEL
(EXIST'G CONDITIONS)

$$LL = 12.46 \frac{SPM}{T} \text{ lbs}/10^3 \text{ GALS. LOADED}$$

S = 0.06 SUBMERGED
LOADING

P = VAPOR PRESSURE

M = MOLECULAR WGT.

T = LIQUID TEMP ($^{\circ}R$)

$$LL = \frac{12.46 \langle .6 \rangle \langle .0004 \rangle \langle 190 \rangle}{125 + 460} = .0009712 \text{ lbs}/10^3 \text{ GAL.}$$

$$= [.0009712 \langle 1,379,980 \text{ BBLs} \rangle \langle 42 \text{ GAL/BBL} \rangle]$$

$$= 56.3 \text{ lbs}/\text{YR} = \underline{\underline{.023 \text{ T/YR}}} \text{ FOR PM-E AND 6}$$

$$LL = \frac{12.46 \langle .6 \rangle \langle .012 \rangle \langle 130 \rangle}{80 + 460} = .0216 \text{ lbs}/10^3 \text{ GAL.}$$

$$= .0216 \langle 750,954 \text{ BBLs/YR} \rangle \langle 42 \text{ GAL/BBL} \rangle$$

$$= 681.3 \text{ lbs}/\text{YR} = \underline{\underline{.34 \text{ T/YR}}} \text{ FOR PM-S AND 11}$$

$$\text{TOTAL LL} = .023 + .34 = \underline{\underline{.363 \text{ T/YR}}}$$

GLEMAN ENGINEERING COMPANY

Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402
(305) 655-0506

JOB 84-101-1

SHEET NO. 7 OF 7

CALCULATED BY MALG DATE APR '84

CHECKED BY _____ DATE _____

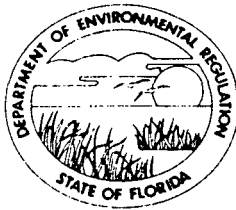
SCALE PORT EVERGLADES - BELCHER OIL

$$\begin{aligned} 10. \text{ TOTAL LOSSES (EXIST'G CONDITIONS)} &= L_B + L_W + L_L \\ &= 3.47 + .643 + .368 \\ &= 4.48 \text{ T/YR} \end{aligned}$$

ATTACHMENT 2

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 11, 1984

CERTIFIED MAIL - Receipt Requested

Mr. Albin Smith, President
Belcher Oil Company
Post Office Box 525500
Miami, Florida 33152

Dear Mr. Smith:

RE: Completeness Review of an Application to Construct/
Modify Air Pollution Sources: Permit No. AC 06-85700

The department has received the above referenced application and cover letter dated April 13, 1984, for the construction of two 10,000 barrel petroleum storage tanks (PM 12 and 13) and the modification of four existing petroleum storage tanks (PM 5,6,8 and 11). The application has been deemed incomplete and the following information, including all assumptions and calculations, shall be submitted before further processing will resume:

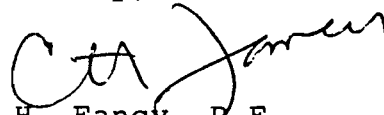
1. If there is any proprietary information required in any response(s) to the following requests, please identify and submit as a separate document and the bureau will maintain confidentiality.
2. Are all major facilities within the State of Florida owned by the applicant or operator of the proposed new and modified sources, or by any entity controlling, controlled by, or under common control with such person(s) in compliance with all applicable emission limitations or other permit conditions? If not, submit an approved compliance schedule for meeting the requirements of FAC Rule 17-2.510(4)(b).
3. What is the height and diameter of each storage tank?

Mr. Albin Smith, President
Page Two
May 11, 1984

4. What is the maximum projected petroleum through-put per year per storage tank?
5. What is the construction/installation date of each existing storage tank that is to be modified?
6. Will there be any increase through-put at the loading racks due to this proposed project?
7. What is the construction permit number(s) that each of the four existing storage tanks were permitted? What was the L_s and L_w per tank per hour and per year? What was the petroleum product being stored in each tank?
8. Submit an inventory of all pollution emitting sources at this existing facility and their permitted emissions of all pollutants. Identify each source by description, its facility ID, and the product handled.

If there are any questions, please call Bruce Mitchell at (904)488-1344 or write to me at the above address.

Sincerely,



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

CHF: jr

cc: Nancy Wright
Isidore Goldman
Troy W. Dalton
Michael K. Coleman
Patrick Wong

ATTACHMENT 3

GLEMAN ENGINEERING COMPANY

324 DATURA STREET

POST OFFICE BOX 3384

WEST PALM BEACH, FLORIDA 33402

TELEPHONE (305) 655-0506

June 8, 1984

DER

JUN 13 1984

BAQM

State of Florida
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Attn: Mr. Bruce Mitchell

Re: Belcher Oil Company
Port Everglades Terminal
Your: AC 06-85700
Our: 84-101-1

Gentlemen:

This letter responds to your May 11, 1984 request for additional information regarding the referenced facility as follows:

1. Information contained in the following responses is not considered proprietary.
2. The subject terminal is the only major facility within the State of Florida owned by Belcher Oil Company.
3. Physical dimensions of each storage tank is as follows:

Rundown tanks #1 & 2:	45 Ft. Dia. by 40 Ft. Height
PM 5-6-8 & 11	: 144 Ft. Dia. by 34 Ft. Height
4. Maximum projected throughput per tank is as follows:

PM 5-6-8-11:	545,792 BBLs/Yr.
Rundown #1 & 2:	540,000 BBLs/Yr.
5. Original construction dates for the existing tanks are 1940 for Tanks PM 5 & 6 and 1941 for Tanks PM 8 & 11.
6. Through-puts at the loading racks will remain within currently permitted flow rates.

- continued -

7. Previous DER Permit numbers that included Tanks PM 5-6-8 & 11 are A0-06-31100 and A0-06-47127. Emission losses and product per tank were as follows:

	<u>Lb</u>		<u>Lw</u>		<u>Product</u>
PM-5:	.161 lbs/Hr.	.71 T/Yr.	.009 lbs/Hr.	.038 T/Yr.	Bunker C
PM-6:	.161 lbs/Hr.	.71 T/Yr.	.009 lbs/Hr.	.038 T/Yr.	Bunker C
PM-8:	1.11 lbs/Hr.	4.9 T/Yr.	.070 lbs/Hr.	.307 T/Yr.	No.2 Oil
PM-11:	1.11 lbs/Hr.	4.9 T/Yr.	.070 lbs/Hr.	.307 T/Yr.	No.2 Oil

8. An inventory of pollution emitting sources at this facility is attached.

We trust this information is sufficient to allow the permitting process to resume. Please feel free to call regarding any question.

Very truly yours,

GLEMAN ENGINEERING COMPANY



Michael K. Gleman, P.E.
President

MKG/lm

cc: Mr. Tom Green - Belcher Oil

FACILITY INVENTORY

Air Pollution Sources
Belcher Oil Company - Port Everglades, Florida
Facility I.D. #:
APIS 50/06/0069

<u>SOURCE</u>	<u>PRODUCT</u>	<u>PERMITTED EMISSIONS</u>
(A) Eighteen (18) Tanks - Fixed Cone Roof (201,202,204,208,209,210, 225,226,PM1,PM2,PM3,PM4, PM5,PM6,PM7,PM8,PM10,PM11)	All petroleum products with vapor pressures less than 1.5 psia.	AO 06-47127 VOC
(B) Eleven (11) Tanks - External Floating Roofs w/Primary & Secondary Seals (203,207, 213,214,215,216,217,218, 219,223,224)	All petroleum products	AO 06-47127 VOC
(C) Four (4) Internal Floating Roof Tanks with Single Seals (205,211,212,220)	All petroleum products with true vapor pressures up to 11 psia.	AO 06-47127 VOC
(D) Four (4) Horizontal Tanks (206,221,222,227)	All petroleum products except gasoline.	AO 06-47127 VOC
(E) Three (3) Boilers @ 4.16 million BTUH and Two (2) Boilers @ 4.35 million BTUH	Burns #2 and #6 fuel oils	AO 06-47127 Total Particulates = .26 lbs/hr (1.1 T/yr.) Total Sulfur Dioxide = 15.48 lbs/hr (67.8 T/yr)
(F) Seven (7) Truck Loading Racks	All petroleum products	AO 06-47127 VOC
(G) One (1) Vapor Recovery Unit (VRU)	Gasoline	A006-69488 VOC

NOTE: See Attached Table #1 from original permit application
See Permit AC06-47127

TABLE 1-PORT EVERGLADES-North Terminal-Tank and Loading Rack Information

<u>Tank No.</u>	<u>Tank Type</u>	<u>Capacity</u>	<u>Product</u>	<u>Tank Dim. (ft)</u>
201	Cone	81,120	Bunker "C"	117' x 42'
202	Cone	80,722	Bunker "C"	117' x 42'
203	Float	29,392	Crude	72' x 40'
204	Cone	15,084	Diesel	50' x 40'
205	Int. Pan	92,468	Crude	120' x 48'
207	Float	55,000	Jet A	100' x 40'
208	Cone	80,315	AC-20	120' x 40'
209	Cone	55,953	AC-20	100' x 40'
210	Cone	20,069	Beloil	60' x 40'
211	Int. Pan	54,247	JP-4	90' x 48'
212	Int. Pan	51,361	Gasoline	90' x 48'
213	Float	53,866	Gasoline	90' x 40'
214	Float	53,898	Gasoline	90' x 40'
215	Float	80,485	JP-4	110' x 48'
216	Float	80,501	JP-4	110' x 48'
217	Float	80,509	JP-4	110' x 48'
218	Float	80,552	Jet A	110' x 48'
219	Float	80,510	JP-4	110' x 48'
220	Int. Pan	41,879	Gasoline	72' x 44'
223	Float	119,649	Crude	134' x 48'
224	Float	119,800	Crude	134' x 48'
225	Cone	5,130	AC-20	35' x 30'
226	Cone	20,000	RC-70	56' x 48'
PM-1	Cone	95,833	Diesel	144' x 34'
PM-2	Cone	96,024	Bunker "C"	144' x 34'
PM-3	Cone	96,501	Bunker "C"	144' x 34'
PM-4	Cone	95,000	Jet A	144' x 34'
PM-5	Cone	95,874	.75 Bunker	144' x 34'
PM-6	Cone	96,133	Bunker "C"	144' x 34'
PM-7	Cone	96,403	Diesel	144' x 34'
PM-8	Cone	96,003	Diesel	144' x 34'
PM-10	Cone	96,427	Jet A	144' x 34'
PM-11	Cone	96,017	Diesel	144' x 34'
		<u>2,392,725</u>	Bbls.	

LOADING RACKS

<u>Load Rack Number</u>	<u>Product</u>
	(#2) (#6) (#5)
Load Rack #1	Diesel, Bunker "C", Beloil
Load Rack #2	RC-70
Load Rack #3	JP-4 Fuel
Load Rack #4	Jet A Fuel
Load Rack #5	Gasoline
Load Rack #6	Asphalt
Load Rack #7 (inflow)	Crude Oil

Note: Tank contents represent products stored at facility at present time. (1980)

ATTACHMENT 4

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

June 27, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Albin Smith, President
Belcher Oil Company
P. O. Box 525500
Miami, Florida 33152

Re: Completeness Review of an Application to Construct/Modify
Air Pollution Sources: Permit No. AC 06-85700

Dear Mr. Smith:

The department has received your letter dated June 8, 1984, responding to the bureau's incompleteness letter dated May 11, 1984. The bureau still finds the application package to be incomplete and the following information, including all assumptions, reference material, and calculations, shall be submitted before further processing will resume:

1. If there is any proprietary information required in any response(s) to the following requests, please identify and submit as a separate document and the bureau will maintain confidentiality.
2. Since the currently permitted gasoline loading racks are restricted to loading a maximum of 3.6 million barrels per year of gasoline, will there be an annual increase in through-put at these loading racks due to this proposed project? If so, submit the potential pollutant emissions expected by this increased annual through-put.
3. Submit an inventory of all VOC (volatile organic compounds) emitting sources at this existing facility and the potential VOC emissions per source (in tons per year (TPY)).

Mr. Albin, Smith, President
Page Two
June 27, 1984

If there are any questions, please write to me at the
above address or call Bruce Mitchell at (904)488-1344.

Sincerely,



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

CHF/BM/s

cc: N. Wright
T. Tittle
P. Wong
T. W. Dalton
M. K. Coleman

ATTACHMENT 5

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: _____	

71 8 1984
 BAQM

TO: Bruce Mitchell, BAQM
 FROM: Tom Tittle, SEFD
 DATE: July 2, 1984
 SUBJECT: Belcher Oil Application No. AC-06-85700

The following comments are in reference to Belcher Oil's response dated June 8, 1984 which was submitted by Gleaman Engineering:

Item 7 - Attached are estimates of emissions based on the original application which included PM 5,6, 8 & 11. Actual and potential emissions are estimated based on the latest AP-42 factors which were not available when initially permitted. Note that the new factors result in significantly lower estimates (relatively) of breathing losses from those originally estimated and given in the response. Also note that potential annual emissions from working losses are not attempted, since there was no through-put limit required. It's difficult (impractical?) to determine potential emissions for existing tanks (how many tank overturns reasonable/possible in a year?).

Item 8 - AC-06-47127 is actually AO-06-47127, but should be given here as AO-06-69488 for all the sources. AO-06-69488 superceded AO-06-47127. Also note that the existing boilers are only subject to the general opacity standard. The emissions given are only estimates.

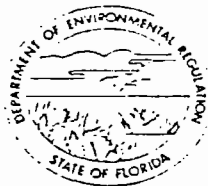
TT:lp:1

Enclosures

cc: Broward County Environmental Quality Control Board

PAID
#500.00
MAY 6 1983
#88122

Dept. of Environmental Reg.
West Palm Beach



RECEIVED

MAY 6 1983

Dept. of Environmental Reg.
West Palm Beach

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

AIR POLLUTION SOURCES
CERTIFICATE OF COMPLETION OF CONSTRUCTION*

PERMIT NO. AC-06-58230 DATE: December 22, 1982

Company Name: Belcher Oil Company County: Broward

Source Identification(s): Loading Rack/Vapor Recovery System

Actual costs of serving pollution control purpose: \$ 290,000

Operating Rates: -- Design Capacity: 60 gpm

Expected Normal 300,000 barrels/month During Compliance Test (forwarded upon completion)

Date of Compliance Test: (forwarded upon completion) (Attach detailed test report)

Test Results:	Pollutant	Actual Discharge	Allowed Discharge
	<u>V.O.C.</u>	<u>(forwarded upon completion)</u>	<u>27.7 mg/l</u>

Date plant placed in operation: April 1, 1983

This is to certify that, with the exception of deviations noted**, the construction of the project has been completed in accordance with the application to construct and Construction Permit No. AC-06-58230 dated Dec. 22, 1982

A. Applicant:

P.W. Moldenhauer
Name of Person Signing (Type)

[Signature]
Signature of Owner or Authorized Representative and Title

Date: 4/25/83 Telephone: 551-5444

B. Professional Engineer:

Kuang-Mei Lo, Ph.D., P.E.
Name of Person Signing (Type)

[Signature]
Signature of Professional Engineer

Clark Engineers and Scientists, Inc.
Company Name

Florida Registration No. 21225

Date: April 25, 1983
(Seal)

7520 S.W. 57th Avenue, Miami, Fl. 33143
Mailing Address

(305) 665-5736
Telephone Number

*This form, satisfactorily completed, submitted in conjunction with an existing application to construct permit and payment of application processing fee will be accepted in lieu of an application to operate.

**As built, if not built as indicated include process flow sketch, plot plan sketch, and updates of applicable pages of application form.

PM5

96874. capacity of #5
 546374. capacity for #6 oil
 3.913 06 #6 oil total
 6.9378843 05 #6 oil through
 693788. 4040 #6 oil through
 693788. 4040 #6 oil through
 0.042 #10³ gal/yr
 29139. 11424
 x10³ gal/yr

PM6

96133.
 546374.
 3.913 06
 6.8848157 05
 688481. 5694
 688481. 5694
 0.042
 28916. 22591 x10³ gal/yr

PM8

96003.
 399340.
 1.561856 06
 3.7547669 05
 375476. 6905
 375476. 6905
 0.042 x10³ gal/yr
 15770.702

PM11

96017.
 399340.
 1.561856 06
 3.7553145 05
 375531. 4458
 375531. 4458
 0.042
 5772. 32072 x10³ gal/yr

PM 8 & 11

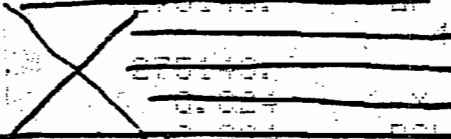
(Based on actual fuel use at time of orig. appl. (discuss))

latest formulas in AP-90

130.
 0.012
 144.
 19.4
 15.7
 1.2
 1.
 1.
 1.
 2730.470528
 2730.470528
 2730.470528 #/yr
 2000.
 1.365235264 TPY each



PM8 0.03744 L#M
 0.03744 #/10³ gal *
 15770. x10³ gal =
 2000. =
 0.2952144 TPY



PM11 0.03744 #/10³ gal L#M
 0.03744 *
 15772. x10³ gal =
 2000. =
 0.29525184 TPY

PM5 & PM6 based on actual fuel use at time of orig. appl. (discuss)

130.
 0.0004
 144.
 19.4
 15.7
 1.2
 1.
 1.
 1.
 394.7954588 #/yr L#B
 394.7954588
 2000.
 1973877294 TPY each
 0.001824 #/10³ gal L#M
 0.001824
 29139 x10³ gal = 2000
 0.0266 TPY (PM5)
 0.001824 #/10³ gal *
 28916 x10³ gal = 2000
 0.0264 TPY (PM6)

Total VOC = 0 TPY (Bunker C is not a VOC under 17-2)

PM5, 6, 8, 11

based on allowed fuel use at time of orig. appl. (Jet-A fuel is worst)

130.
 0.015
 144.
 19.4
 15.7
 1.2
 1.
 1.
 1.

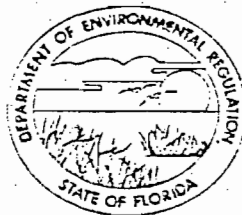
3178.312726 #/yr L#B
 3178.312726
 2000.
 1.589156240 TPY
 Potential estimated (realistic?) 0.0468 #/10³ gal L#M
 Jet-A → 0.0468 *
 Fuel through? x10³ gal =
 2000 ÷
 TPY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

FILE

SOUTHEAST FLORIDA
DISTRICT

P.O. BOX 3858
3301 GUN CLUB ROAD
WEST PALM BEACH, FLORIDA 33402-3858



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ROY M. DUKE
DISTRICT MANAGER

December 13, 1983

AP - Broward County
Belcher Oil Company Port Everglades
Terminal

Mr. P.W. Moldenhauer
Belcher Oil Company
P. O. Box 525500
Miami, Florida 33152

Dear Mr. Moldenhauer:

Enclosed is Permit Number A0 06-69488, to operate an air pollution source issued pursuant to Section 403.087, Florida Statutes.

Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Florida Administrative Code Rule 28-5.201 (see reverse side of this letter). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

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 action for violation of the conditions and requirements thereof.

Sincerely,

I. Goldman

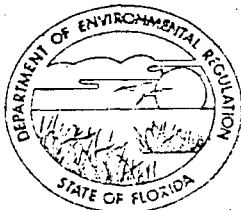
I. Goldman
Engineer
Air Permitting Section

cc: Broward County Environmental Quality
Control Board

IG:my:9

Enclosure

DEPARTMENT OF ENVIRONMENTAL REGULATION



ISS 12/13/83
EXP 11/13/86

BOB GRAHAM
GOVERNORVICTORIA J. TSCHINKEL
SECRETARYROY M. DUKE
DISTRICT MANAGERSOUTHEAST FLORIDA
DISTRICTP.O. BOX 3358
3301 GUN CLUB ROAD
WEST PALM BEACH, FLORIDA 33402-3858

PERMITTEE:

Mr. P. W. Moldenhauer
Belcher Oil Company
P. O. Box 525500
Miami, Florida 33152I.D. NUMBER: APIS 50/06/0069
PERMIT/CERTIFICATION NUMBER: AO 06-69488
DATE OF ISSUE:
EXPIRATION DATE: November 13, 1986
COUNTY: Broward
LATITUDE/LONGITUDE:
UTM: Zone 17; 587.3 Km. E., 2886.3 Km. N.
SECTION/TOWNSHIP/RANGE:
PROJECT: Belcher Oil Company
Port Everglades Terminal

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-2. 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 Department and made a part hereof and specifically described as follows:

OPERATE: A petroleum products terminal consisting of:

- °Two gasoline loading racks (Total of 4 loading positions) with a total capacity of 136,000 gal/hr, controlled by a vapor recovery unit, emitting VOC at 12 ft. above ground level.
- °18 fixed cone roof tanks (201, 202, 204, 208, 209, 210, 225, 226, PM1, PM2, PM3, PM4, PM5, PM6, PM7, PM8, PM10, PM11), which can be used for petroleum products with vapor pressures less than 1.5 psia.
- °11 external floating roof tanks with primary and secondary seals (203, 207, 213, 214, 215, 216, 217, 218, 219, 223, 224) which can be used for all petroleum products.
- °Four internal floating roof tanks (205, 211, 212, 220) with single seals which can be used for petroleum products with true vapor pressures up to 11 psia.
- °Four horizontal tanks (206, 221, 222, 227) which can be used for all petroleum products.

The above tanks emit volatile organic compounds (VOC) to the atmosphere at a generalized height of 42 feet above ground level. There are seven non-gasoline truck loading racks, which emit VOC at 12 feet above ground level.

In addition, there are three 4.16 million BTU/hr boilers burning No. 6 fuel oil emitting pollutants through individual stacks 20 feet above ground level. *also two 4.55 million BTU/hr boilers emitting #2*

IN ACCORDANCE WITH: Certificate of Completion dated April 28, 1983; Construction Permit Application dated July 14, 1982 as amended by letters of September 24, 1982 and October 28, 1983; and Air Pollution Sources Operation Permit Application dated April 28, 1980 as amended June 11, 1980 (none attached).

CONTINUED ON NEXT PAGE

Page 1 of 6

DER Form 17-1.201(5)

Effective November 30, 1982 EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

PERMITTEE:
Mr. P. W. Moldenhauer
Belcher Oil Company

I.D. Number: APIS 50/06/0069
Permit/Certification Number: AO 06-69488
Date of Issue:
Expiration Date: November 13, 1986

LOCATED AT: 2401 Eisenhower Blvd., Port Everglades, Fort Lauderdale, Broward County, Florida.

TO SERVE: A bulk gasoline terminal (SIC #5171).

SUBJECT TO: General Coniditions 1-15 and Special Conditions 1-9

NOTE: THIS PERMIT VOIDS AND SUPERSEDES PERMIT AO 06-47127 ISSUED NOVEMBER 13, 1983
MR. P. W. MOLDERHAUER/BELCHER OIL COMPANY

BEST AVAILABLE COPY

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, 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 403.037(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 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, animals, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permit, 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.
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

PERMITTEE:

I.D. Number:

Permit/Certification Number:

Date of Issue:

Expiration Date:

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

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 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 of 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 Rule 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)
- () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
- () 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 of 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 and information shall be submitted or corrected promptly.

PERMITTEE:
Mr. P. W. Moldenhauer
Belcher Oil Company

I.D. Number: APIS 50/06/0069
Permit/Certification Number: AO 06-69488
Date of Issue:
Expiration Date: November 13, 1986

SPECIFIC CONDITIONS:

1. Compliance testing shall be conducted for the sources covered by this permit by July 1984 and annually thereafter in accordance with the methods specified below.

2. Emission limiting standards are as follows:

In accordance with applicant's request of Federal Register
Maximum allowable VOC emissions from the two loading racks/vapor recovery unit *(later on)* system shall not exceed 35 milligrams/liter (2.04 grains/gallon) of gasoline loaded, (equivalent to 39.7 lb/hr at maximum loading rate) and 22.1 tons per year based on a maximum annual gasoline output through both racks of 3,600,000 barrels per year.

3. The compliance test report shall include emissions tested by the following methods:

3 *Hot Oil Tank*
Source/Emission Point

Visible emissions
Pollutant

EPA method 9 (prior to renewal)
Test Method

Vapor Controls

VOC

In accordance with method given in EPA 450/2-77-026 Appendix A as modified by Florida Administrative Code Rule 17-2.700(6)(C)2.b.(i)(A).

Vapor Leaks Detection

VOC

EPA 450/2-78-051 Appendix B and FAC Rule 17-2.700(6)(C)2.b.(ii)(A)

The compliance test report shall be submitted to the Department in accordance with Florida Administrative Code (F.A.C.) Rule 17-2.700(7).

4. During the compliance test, the gasoline loading rate shall be representative of "normal operation" as outlined in EPA test method guideline, EPA 450/2-77-026, Appendix A, Section 5-2.

5. The Department shall be notified of expected test dates at least ten (10) days prior to compliance testing.

6. For each source in this permit, on or before March 1 of each calendar year, a completed DER Form 17-1.202(6), Annual Operations Report Form for Air Emissions Sources shall be submitted to the Department. This report shall demonstrate compliance with the annual emissions and throughput limitations for gasoline loading racks.

PERMITTEE:
Mr. P. W. Moldenhauer
Belcher Oil Company

I.D. Number: APIS 50/06/0069
Permit/Certification Number: AO 06-69488
Date of Issue:
Expiration Date: November 13, 1986

SPECIFIC CONDITIONS CONTINUED:

7. Copies of all reports, tests, notifications or other submittals required by this permit shall be submitted to both the Department of Environmental Regulation, Southeast District Office and Broward County Environmental Quality Control Board.

8. Annually all tank seals shall be inspected in accordance with Florida Administrative Code (FAC) Rules 17-2.650(1)(f)8.b(ii) and (iii), and 7-2.650 (1)(f) 17.b(i)(B) thru (F).

9. Liquid waste from the loading device shall not exceed the quantity specified for the self-sealing coupler or adapter according to API regulation RP 1004 (or equivalent) upon the loading device being disconnected or when it is not in use.

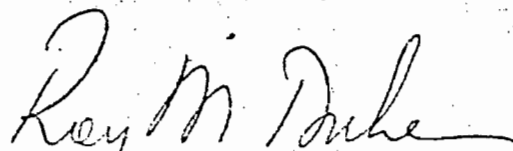
NOTE: The sources covered by this permit are expected to emit the following amounts of pollutants:

Particulate	1.1 tons/year
SO ₂	67.8 tons/year
VOC's	187.4 tons/year

Based on: Calculations shown in applications and 8760 hours of annual operation. No emissions result from approximately 157 million gallons of gasoline, Jet A and JP4 moved by pipeline and 248 million gallons of crude oil and #2 fuel oil moved by ship annually.

Issued this 13th day of December, 1983

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



Roy M. Duke
District Manager

IG

ATTACHMENT 6

GLEMAN ENGINEERING COMPANY

324 DATURA STREET

POST OFFICE BOX 3384

WEST PALM BEACH, FLORIDA 33402

TELEPHONE (305) 655-0506

July 11, 1984

State of Florida
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Attention: Mr. Bruce Mitchell

Re: Belcher Oil Company
Port Everglades Facility
Your: AC 06-85700
Our: 84-101-1

DER

JUL 19 1984

BACM

Gentlemen:

This letter responds to your June 27, 1984 request for additional information as follows:

1. Information contained in the following responses is not considered proprietary by Belcher Oil Company.
2. Gasoline throughput at the gasoline loading racks will not exceed the currently permitted maximum of 3.6 million barrels per year.
3. Enclosed herewith are copies of emission calculations for the emitting sources at this facility. These calculations are the original 1980 and 1982 calculations submitted to the DER to secure construction permits. Calculations were made in accordance with AP-42 and are shown in tons per year (TPY).

We trust this information is sufficient to allow permit application processing to resume. Please feel free to call should additional information be required.

Very truly yours,



Michael K. Gleman, P.E.
President

MKG/lm
Enc.

cc: Mr. Tommy Green
Belcher Oil Company (w/o enc.)

ATTACHMENT 7

BEST AVAILABLE COPY

GLEMAN ENGINEERING COMPANY

324 DATURA STREET

POST OFFICE BOX 3384

WEST PALM BEACH, FLORIDA 33402

TELEPHONE (305) 655-0506

July 16, 1984

FILED
JUL 18 1984
FAC

State of Florida
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Attention: Mr. Bruce Mitchell

Re: Belcher Oil Company
Port Everglades Facility
Your: AC 06-85700
Our: 84-101-1

Gentlemen:

Confirming our telephone conversation of this morning related to Rundown Tanks #1 and #2 for the referenced project, please be advised that these tanks will be fitted with liquid mounted resilient primary seals with rim mounted secondary seals. Calculations previously submitted for these tanks reflect this type of seal system with K_s and N factors being 0.7 and 0.4 respectively.

Please feel free to call regarding any other question.

Very truly yours,



Michael K. Gleman, P.E.
President

MKG/lm

cc: Mr. Tommy Green
Belcher Oil Company

Technical Evaluation
and
Preliminary Determination

Belcher Oil Company - Port Everglades
Broward County, Florida

Vapor Recovery Unit for Gasoline

Loading Rack

Application Number:

AC 06-58230

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

PUBLIC NOTICE

The Department intends to issue a permit to the Belcher Oil Company-Port Everglades for the construction of a vapor recovery unit servicing the gasoline loading rack at the applicant's existing facility in Fort Lauderdale, Broward County, Florida. The permit will include conditions to assure compliance with Chapter 17-2, Florida Administrative Code (FAC).

Any person wishing to file comments on this proposed action may do so by submitting such comments in writing to:

Mr. C. H. Fancy, P.E.
Deputy Bureau Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Any comments received within thirty days after publication of this notice will be considered and noted in the Department's final determination.

Any person whose substantial interest would be affected by the Department's intended action on this permit may request an administrative hearing by filing a petition as set forth in Section 28-5.15, FAC, within fourteen days of the date of this notice with:

Ms. Martha Hall
Office of General Counsel
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

I. PROJECT DESCRIPTION

A. Applicant

Belcher Oil Company
Port Everglades Gasoline Terminal
2401 Eisenhower Blvd.
Fort Lauderdale, Florida 33152

B. Project and Location

The applicant intends to install a vapor recovery unit to service the gasoline loading rack at its existing facility in Fort Lauderdale, Broward County, Florida.

The existing facility is located at the above address with UTM coordinates of Zone 17-587.3 km East and 2886.3 km North. The terminal is also located in a nonattainment area for the pollutant VOC (Volatile Organic Compounds).

C. Process and Controls

There are two gasoline truck loading positions at the loading rack. In projecting an hourly throughput, the applicant assumed that a maximum of 4 trucks can be filled per hour per position. Therefore, projecting a maximum of 8 trucks that can be filled in one hour and 8,500 gallons per truck, the estimated maximum hourly throughput is 68,000 gallons.

The VOC pollutants emitted from the loading rack will be controlled with a vapor recovery unit (VRU) having an assumed VOC removal efficiency of 98% (vendors specifications). The estimated VOC emissions from the VRU are 15.7 lbs/hr and 17.4 TPY.

II. RULE APPLICABILITY

The only criteria air pollutants emitted from the VRU are classified as volatile organic compounds (VOC) by definition in accordance with Chapter 17-2.100(175), Florida Administrative Code (FAC).

The existing facility is a major facility in accordance with Chapter 17-2.100(95), FAC, and is located in the Broward County ozone nonattainment area. VOC pollutants are precursors to ozone and are therefore controlled in accordance with Chapter 17-2.510, FAC, New Source Review (NSR) for Nonattainment Areas.

The proposed source's VOC potential emissions are 15.7 lb/hr and 17.4 TPY and would constitute a minor modification to a major facility, subject to Chapter 17-2.510(2)(d)4.a.,

FAC. Since the emissions increase is not greater than the significant level of 40 TYP VOC, as set forth in Chapter 17-2.510(2)(e)2., FAC, the proposed source shall be exempt from Chapter 17-2.510(4), FAC, Preconstruction Review Requirements. Therefore, the proposed source will be permitted in accordance with Chapter 17-2.520, FAC.

Since there is an emission limiting and performance standard for bulk gasoline terminals, the source's emission limits will be permitted in accordance with Chapter 17-2.650(1)(f)10., FAC. The applicant requested that the VOC emission limits to be 15.7 lbs/hr (27.7 milligrams per liter, 1.62 grains/gallon) and 17.4 TPY. The purpose of setting the VOC emission limits below RACT allowable limits was to be exempt from Preconstruction Review Requirements in accordance with Chapter 17-2.510(2)(d)4.a., FAC.

Besides the requirement of an emission limit for VOC's, a VRU is also required to be installed. This is the purpose of this particular permit application.

Compliance with the VOC emission limits must be in accordance with the method referred in Chapter 17-2.700(6)(c) 2.b.(i), FAC.

III. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS

A. Emission Limitations

The regulated pollutant emissions from this source are VOC's from the gasoline loading rack in accordance with Chapter 17-2.650(1)(f)10., FAC.

<u>Pollutant</u>	<u>VOC Allowable Emissions</u>	
VOC	15.7 lb/hr	17.4 TPY

The permitted VOC emissions are in compliance with all applicable requirements of Chapter 17-2, FAC.

B. Air Quality Impacts

An air quality analysis is not necessary under the applicable regulations for this source.

IV. CONCLUSIONS

The emission limits proposed by the applicant have been determined to be in compliance with all applicable requirements of Chapter 17-2, FAC.

The permitted VOC allowable emissions from this source of 15.7 lbs/hr and 17.4 TPY should not cause any violation of Florida's ambient air quality standards. A properly operated and maintained vapor recovery unit will keep the VOC emission levels below the allowable limits.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of Chapter 17-2, FAC.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

APPLICANT:

Belcher Oil Company
Port Everglades Bulk Gasoline Terminal
P. O. Box 525500
Fort Lauderdale, Florida 33152

PERMIT/CERTIFICATION
NO. AC 06-58230

COUNTY: Broward

PROJECT: Vapor Recovery
Unit for Bulk Gasoline
Terminal Loading Rack.

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

For the construction/installation of a vapor recovery unit for servicing the gasoline loading rack at the applicant's existing facility located at 2401 Eisenhower Blvd., Fort Lauderdale, Florida. The UTM coordinates are Zone 17-587.3 km East and 2886.3 km North.

Construction shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on pages 3 and 4 of the "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).
2. C. H. Fancy's Letter of Incompleteness dated August 6, 1982.
3. John McNally's letter of response dated September 24, 1982.
4. Attachment to Specific Condition No. 5.

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

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 Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court 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 indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. 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 non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. 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.
4. As provided in subsection 403.087(6), 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.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. 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 Section 403.111, F.S.
7. In the case of an operation permit, 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.
8. 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, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.
13. This permit also constitutes:
 - Determination of Best Available Control Technology (BACT)
 - Determination of Prevention of Significant Deterioration (PSD)
 - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

SPECIFIC CONDITIONS:

1. Maximum allowable VOC emissions from the loading rack/vapor recovery system shall not exceed 15.7 lbs/hr (27.7 milligrams/liter, 1.62 grains/gallon) and 17.4 TPY (tons per year) of gasoline loaded.
2. Compliance with the mass emission limitation of Specific Condition No. 1 shall be determined in accordance with the method referred in 17-2.700(6)(c)2.b.(i), FAC (EPA 450/2-77-026, Appendix A). At least 30 days prior to the date of compliance testing, the DER Southeast Florida District Office or its designee shall be notified in order to witness the test.
3. The average gasoline loading rate of the loading rack, total of the two loading positions, shall not exceed 68,000 gallons per hour.
4. Annual operating reports shall be submitted to the DER Southeast Florida District Office or its designee. This report shall contain records of the gasoline throughput.
5. During the compliance test, the gasoline loading rate shall be representative of "normal operation" as outlined in the attached EPA test method guideline, EPA 450/2-77-026, Appendix A, section 5-2.
6. Prior to 90 days before the expiration of this permit a complete application for an operating permit and compliance test results shall be submitted to the DER Southeast Florida District Office or its designee. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration or receipt of an operating permit.

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

Expiration Date: June 1, 1983

Issued this _____ day of _____, 19_____.

1 Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Signature

PAGE 4 OF 4

ATTACHMENT 1

DER

JUL 19 1982

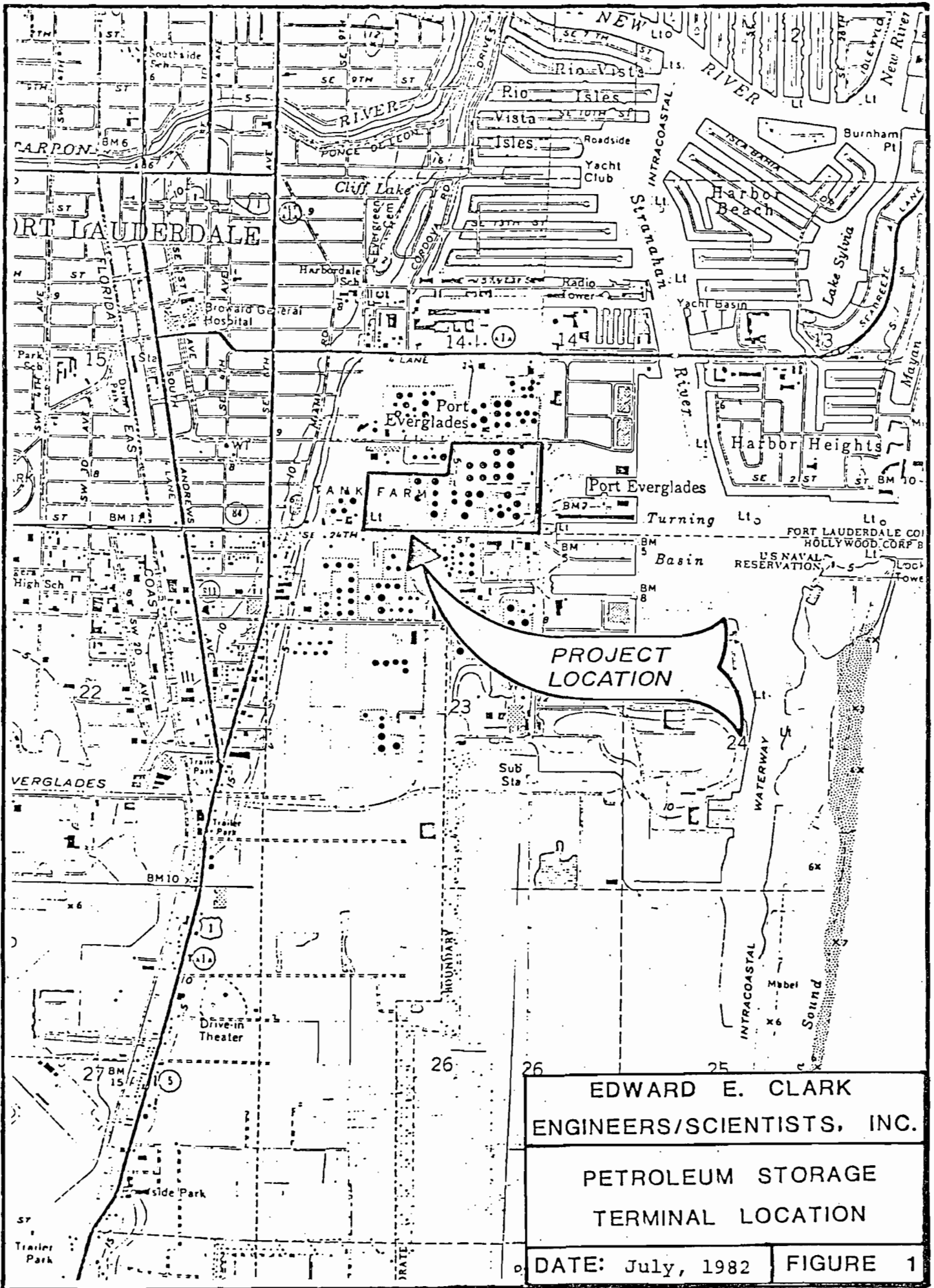
BAQM

Air Pollution Source
Construction Permit Application
for
Belcher Oil Company
Port Everglades Terminal

July, 1982

INTRODUCTION

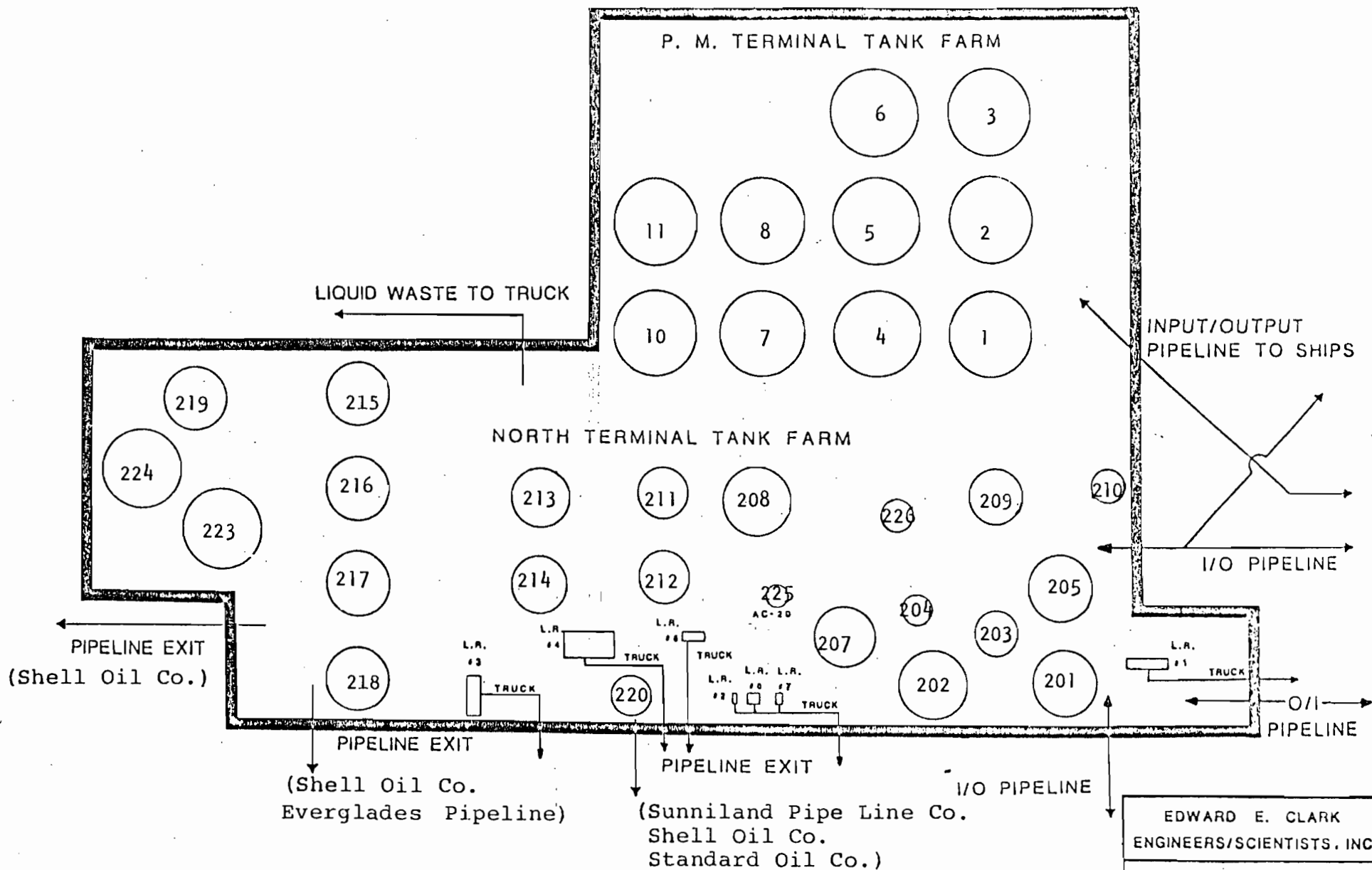
Belcher Oil Company operates a petroleum storage/transfer terminal at Port Everglades, Florida. The location of this facility is indicated in Figure 1. The facility includes a tank farm consisting of numerous storage tanks as well as several loading racks used for product transfer. The location of these storage tanks and loading racks is presented in Figure 2. Table 1 lists tank characteristics and product information. Gasoline is one of the products handled at the facility and requires the installation of a vapor recovery unit for the loading of this product. The installation of this vapor recovery unit requires an Air Pollution Source Permit from the Department of Environmental Regulation.



EDWARD E. CLARK
ENGINEERS/SCIENTISTS, INC.

PETROLEUM STORAGE
TERMINAL LOCATION

DATE: July, 1982 FIGURE 1



EDWARD E. CLARK
ENGINEERS/SCIENTISTS, INC.

FACILITY FLOW DIAGRAM
AND AIRBORNE EMISSION
SOURCES

DATE: July 1982 FIGURE 2

6/7/82

TABLE 1-PORT EVERGLADES-North Terminal-Tank and Loading Rack Information

Tank No.	Tank Type	Capacity	Product	Tank Dim. (ft)
201	Cone	81,120	Bunker "C"	117' x 42'
202	Cone	80,722	Bunker "C"	117' x 42'
203	Float	29,392	Crude	72' x 40'
204	Cone	15,084	Diesel	50' x 40'
205	Int. Pan	92,468	Crude	120' x 48'
207	Float	55,000	Gasoline	100' x 40'
208	Cone	80,315	AC-20	120' x 40'
209	Cone	55,953	AC-20	100' x 40'
210	Cone	20,069	Beloil (#5)	60' x 40'
211	Int. Pan	54,247	JP-4	90' x 48'
212	Int. Pan	51,361	Gasoline	90' x 48'
213	Float	53,866	Gasoline	90' x 40'
214	Float	53,898	Gasoline	90' x 40'
215	Float	80,485	JP-4	110' x 48'
216	Float	80,501	JP-4	110' x 48'
217	Float	80,509	JP-4	110' x 48'
218	Float	80,552	Gasoline	110' x 48'
219	Float	80,510	JP-4	110' x 48'
220	Int. Pan	41,879	Gasoline	72' x 44'
223	Float	119,649	Crude	134' x 48'
224	Float	119,800	Crude	134' x 48'
225	Cone	5,130	AC-20 (rundown)	35' x 30'
226	Cone	20,000	RC-70	56' x 48'
PM-1	Cone	95,833	Diesel	144' x 34'
PM-2	Cone	96,024	Bunker "C"	144' x 34'
PM-3	Cone	96,501	Bunker "C"	144' x 34'
PM-4	Cone	95,000	Jet A	144' x 34'
PM-5	Cone	95,874	No. 2	144' x 34'
PM-6	Cone	96,133	Bunker "C"	144' x 34'
PM-7	Cone	96,403	Diesel	144' x 34'
PM-8	Cone	96,003	Diesel	144' x 34'
PM-10	Cone	96,427	Jet A	144' x 34'
PM-11	Cone	96,017	Diesel	144' x 34'

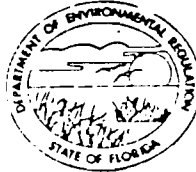
2,392,725 Bbls.

LOADING RACKS

<u>Load Rack Number</u>	<u>Product</u>		
	(#2)	(#6)	(#5)
Load Rack #1	Diesel,	Bunker "C",	Beloil
Load Rack #2	RC-70		
Load Rack #3	JP-4 Fuel		
Load Rack #4	Jet A Fuel,	Gasoline	
Load Rack #5	Out of service		
Load Rack #6	Asphalt		
Load Rack #7*	Crude Oil		

* (emergency use only)
(last used-1978)

Note: Tank contents represent products stored at facility at present time.



AC 06-58230

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
APPLICATION TO OPERATE/CONSTRUCT
AIR POLLUTION SOURCES

DER
JUL 17 1982
BAQM

SOURCE TYPE: Gasoline Loading Racks with VRU [] New¹ [X] Existing¹
APPLICATION TYPE: [X] Construction [] Operation [X] Modification
COMPANY NAME: Belcher Oil Company (Port Everglades Facility) COUNTY: Broward
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) Vapor Recovery Unit servicing gasoline loading rack
SOURCE LOCATION: Street 2401 Eisenhower Blvd. City Fort Lauderdale
UTM: East 587.3 km North 2886.3 km
Latitude 26 ° 05 ' 40 "N Longitude 80 ° 07 ' 39 "W
APPLICANT NAME AND TITLE: P.W. Moldenhauer, Corporate Engineer
APPLICANT ADDRESS: P.O. Box 525500, Miami, FL 33152

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Belcher Oil Company

I certify that the statements made in this application for a construction/modification 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: [Signature]
P.W. Moldenhauer, Corporate Engineer
Name and Title (Please Type)
Date: 7/17/82 Telephone No. (305) 551-5444

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: [Signature]
Edward E. Clark, Ph.D., P.E.
Name (Please Type)
Clark Engineers-Scientists, Inc.
Company Name (Please Type)

(Affix Seal)

7520 SW 57 Avenue, Miami, FL 33143
Mailing Address (Please Type)
Date: 7/13/82 Telephone No. (305) 665-5736

Florida Registration No. 15341

¹See 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.

A carbon absorption/adsorption vapor recovery unit will be installed to recover displaced contaminated air during transport truck loading operations. The VRU will be in full compliance.

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

Start of Construction approx. 6 months Completion of Construction approx. 3 to 6 months

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.)

Total cost of pollution control system and installation:

\$163,000 equipment

\$127,000 installation

\$290,000 total

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

A0 06-47127 issued: 11/13/81 expires: 11/13/82

Industrial Waste Permit: application on file (IO-06-55002)

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 No

F. Normal equipment operating time: hrs/day -; days/wk -; wks/yr -; if power plant, hrs/yr -; if seasonal, describe: Vapor Recovery Unit will be operated to accommodate transport truck loading of gasoline product.

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?

Yes

a. If yes, has "offset" been applied?

N/A

b. If yes, has "Lowest Achievable Emission Rate" been applied?

N/A

c. If yes, list non-attainment pollutants.

Volatile Organic Compounds

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.

No

3. Does the State "Prevention of Significant Deterioration" (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.

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

A. Raw Materials and Chemicals Used in your Process, if applicable: Not 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): _____

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: See Attachment A

Name of Contaminant	(1) Emission ¹		Allowed Emission ² Rate per Ch. 17-2, F.A.C.	(3) Allowable ³ Emission lbs/hr	(4) Potential Emission ⁴		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Volatile	62.3	43.6	Good practice in accordance with FAC section 17.2; 80 mg/l product loaded	72.1	747.9	523.6	Loading
Organic							
Compounds							
	(calc sht. 2)			(calc sht 3)	(calc sht 3)		

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)
Vapor Recovery Unit (McGill-Carbon Adsorption/Adsorption System- Model No. MRC-404HS)	V.O.C.	98*	Not Applicable	See Calc.

¹See Section V, Item 2.

²Reference 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)

³Calculated from operating rate and applicable standard

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

⁵If Applicable

*This efficiency value is based on manufacturer's specifications. Actual efficiency value used in calculations is 95%.

ATTACHMENT A

Notes:

1. Column (1) represents maximum hourly emissions with pollution controls. Loading losses are based on maximum loading rack design throughputs for each product.
2. Column (2) represents actual annual emissions for each product with pollution controls. Loading losses are based on actual annual product throughput rates.
3. Column (3) represents allowable loading emissions for gasoline (80 mg/l product loaded) based on maximum loading rack throughput for gasoline.
4. Column (4) represents maximum hourly emissions resulting from operations without pollution control. Loading losses are based on maximum loading rack throughput rates for each product.
5. Column (5) represents the potential annual emissions without pollution control equipment. Loading losses are based on actual annual product throughputs.

E. Fuels Not Applicable

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

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

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____
 Density: _____ lbs/gal Typical Percent Nitrogen: _____
 Heat Capacity: _____ BTU/lb _____ BTU/gal
 Other Fuel Contaminants (which may cause air pollution): _____

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

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

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

Stack Height: 2 @ 12' above ground _____ ft Stack Diameter: 6" at outlet T _____ ft
 Gas Flow Rate: max 264.7/stack ACFM Gas Exit Temperature: approx. ambient °F.
 Water Vapor Content: _____ % Velocity: 22.5 FPS

*Above values represent flow rate at maximum loading rate. The flow rate will vary depending on actual loading rate.

SECTION IV: INCINERATOR INFORMATION Not Applicable

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. N/A
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 calculation sheets).
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). (See manufacturer's description)
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.). (See manufacturer's description)
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). (See manufacturer's description)
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 Figure 2 – Facility Site Plan)
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 Figure 1 – Location 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. (See Figure 2 – Facility Site Plan)

- 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 Not Applicable

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: | 4. Capital Costs: |
| 2. Operating Principles: | 6. Operating Costs: |
| 3. Efficiency: * | 8. <u>Maintenance Cost:</u> |
| 5. Useful Life: | |
| 7. Energy: | |
| 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

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
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

(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 Not Applicable

A. Company Monitored Data

1. _____ no sites _____ TSP _____ () SO₂* _____ 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.

H. W. WILCOX ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil Company JOB NO. 8015.1 COMPUTED BY JJM DATE 7/13/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit Emissions SHEET _____ OF _____

Belcher Oil Company
Port Everglades Terminal
Vapor Recovery Unit Emission
Calculations

ENVIRONMENTAL PROTECTION AGENCY ENGINEERS - CONSULTANTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil Company JOB NO. 8015.1 COMPUTED BY JJM DATE 7/13/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit SHEET 1 OF 3

Gasoline Loading Losses:

loading rack no. 4
vapor recovery unit
design throughput flow = 300,000 bbls/mo
maximum throughput flow = 600 gal/min. per
loading position ∴ 3 positions = 1800 gal/min.

Loading Loss Equation:

$$L_L = 12.46 \frac{S P M}{T} \left(1 - \frac{EFF}{100} \right)$$

L_L = loading loss, $lb/10^3$ gal liquid loaded

S = saturation factor = 0.60; submerged loading; normal dedicated service

M = vapor molecular weight = 63.3, $lb/lb\text{-mole}$

T = 73°F = 533°R

EFF = control efficiency

P = vapor pressure = 7.8 psia; RVP 12

Product data and loading rates from
Belcher Oil Company

* Loading loss equation from U.S. Environmental Protection Agency Publication No. AP-42.

UNIVERSAL E. C. GILMAN ENGINEERING CORPORATION, INC.
MIAMI, FLORIDA

JOB Belcher Oil Company JOB NO. 8015.1 COMPUTED BY JJM DATE 7/13/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit SHEET 2 OF 3

Section III Air Pollution Sources and Control
Item C Devices - Airborne Contaminants
Emitted

Maximum Hourly Emission (with vapor recovery)

$$L_L = \frac{(12.46)(2.0)(7.8)(63.3)}{(533)} (1 - .95)(108,000 \frac{\text{gal}}{\text{hr.}})$$

$$L_L = (0.5771 \frac{\text{lbs}}{10^3 \text{ gal}}) (108,000 \text{ gal/hr.})$$

$$L_L = \underline{\underline{62.3 \text{ lbs./hr.}}}$$

Actual Annual Emission (with vapor recovery)

$$L_L = (0.5771 \frac{\text{lbs}}{10^3 \text{ gal}}) (300,000 \text{ bbls/mo}) (42)$$

$$L_L = 7271.6 \frac{\text{lbs}}{\text{mo}} \cdot 12 = 87,259 \text{ lbs/yr}$$

$$L_L = \underline{\underline{43.6 \text{ tons/yr}}}$$

WALTER D. DELAUNE ENGINEERS - SOLUTIONISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil Company JOB NO. 8015.1 COMPUTED BY JJM DATE 7/13/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit SHEET 3 OF 3

Allowable Emission

$$L_{L \text{ Allowable}} = (80 \text{ mg/l}) \left(\frac{3.785 \text{ l}}{\text{gal}} \right) \left(\frac{1 \text{ b}}{453,592 \text{ mg}} \right) (108,000 \text{ gal/hr})$$

$$L_{L \text{ Allowable}} = \underline{72.1 \text{ lbs/hr}}$$

Potential Emission: (no vapor recovery)

Maximum Hourly:

$$L_{L \text{ Max}} = \frac{(12.46)(0.6)(6.3.3)(7.8)(1 \text{ b})}{(533)(10^3 \text{ gal})} (108,000 \text{ gal/hr})$$

$$L_{L \text{ Max}} = \frac{(6.9253)(108,000 \text{ gal/hr})}{10^3 \text{ gal}} = 747.9 \text{ lbs/hr.}$$

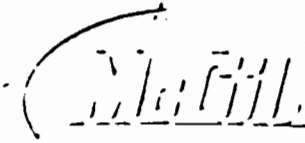
$$L_{L \text{ max}} = \underline{747.9 \text{ lbs/hr}}$$

Annual Potential (no vapor recovery)

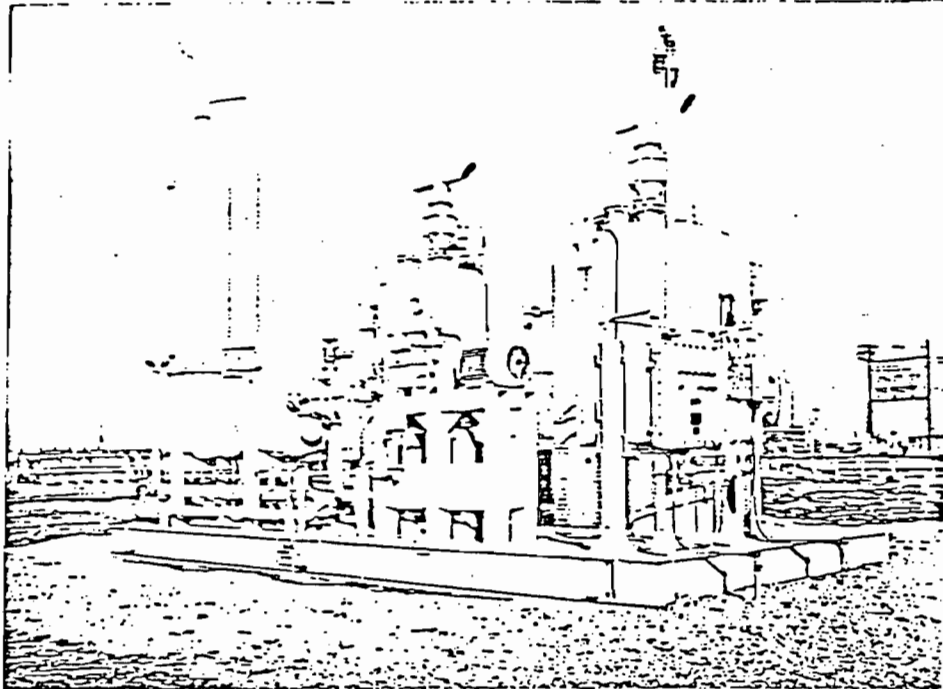
$$L_{L \text{ Annual}} = \left(\frac{6.9253 \text{ lbs}}{10^3 \text{ gal}} \right) (300,000 \frac{\text{b}}{\text{mo}}) (12) (42)$$

$$L_{L \text{ Annual}} = \underline{1,047,110 \text{ lbs./yr.} = 523.6 \text{ tons/yr.}}$$

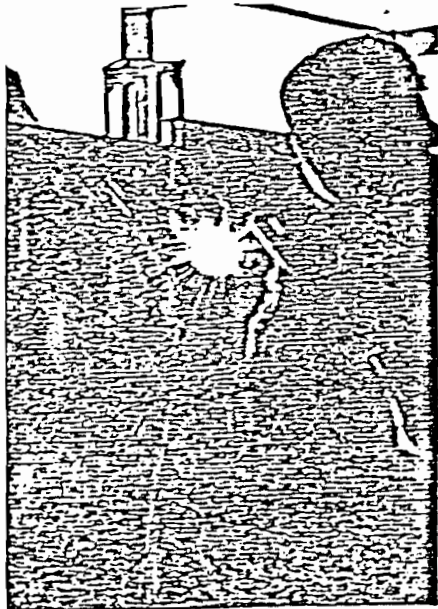
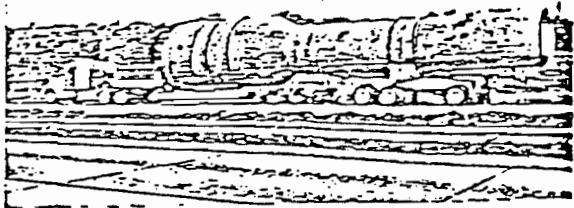
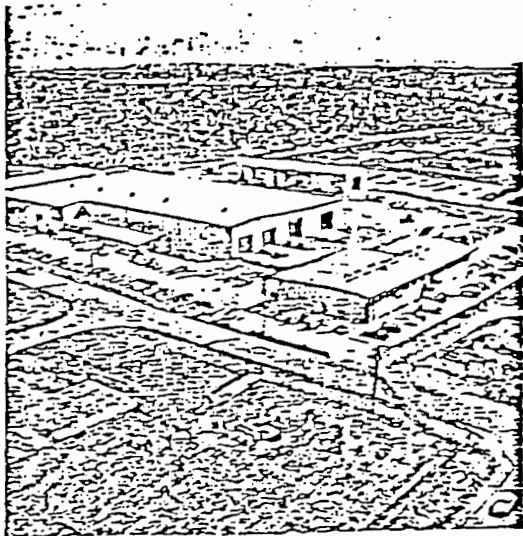
II. VAPOR RECOVERY SYSTEM-
MANUFACTURER'S PROCESS
DESCRIPTION



The McGill Adsorption/Absorption Gasoline Vapor Recovery System



McGILL INCORPORATED
THE TECHNOLOGY PEOPLE



McGILL INCORPORATED
P.O. Box 9667
Tulsa, OK 74107
918-445-2431
Telex 79-6434

BROCK EASLEY, INC.
80 Inverness Drive East
Englewood, Colorado 80112
303-773-2333
Telex 910-935-0119

Other Offices in

- Casper, Wyoming 307-234-8500
- Irvine, California 714-752-7333
- Kirkland, Washington 206-828-4588
- Salt Lake City, Utah 801-521-9464
- Tempe, Arizona 602-956-2461
- Lafayette, California 415-284-9315

EQUIPMENT SPECIALISTS, INC.
35 Walnut Avenue
Clark, New Jersey 07066
201-388-8300
Telex 13-8927

GOBLE & BROWN, INC.
6400 SW Freeway, Suite 300
Houston, Texas 77074
713-780-4448
Telex 79-1071

Other Offices in

- Baton Rouge, Louisiana 504-292-7596
- Beaumont, Texas 713-632-0136
- Atlanta, Georgia 404-231-4136
- Spanish Fort, Alabama 205-626-5306

MYERS-AUBREY COMPANY
7477 East 46th Place
P.O. Box 45370
Tulsa, Oklahoma 74145
918-622-3500
Telex 79-6075

Other Offices in

- St. Louis, Missouri 314-569-1522
- Shawnee Mission, Kansas 913-432-8026

FOREIGN OFFICES

GILBARCO LTD.
CROMPTON CLOSE
BASILDON, ESSEX
UK SS14 3BA
phone — Basildon 3090
Telex 99231 a/c 851

Other Offices in

- Paris, France
- Hamburg, West Germany
- Deklomp, Nederland
- Rome, Italy
- Maggio, Italy
- Oslo, Norway
- Zurich, Switzerland

GILBARCO AUSTRALIA, LTD.
12-38 Talavera Rd.
P.O. Box 63
North Ryde, NSW 2113
Australia
phone — 888-6577
Telex AA20832 a/c 790

BEST AVAILABLE COPY

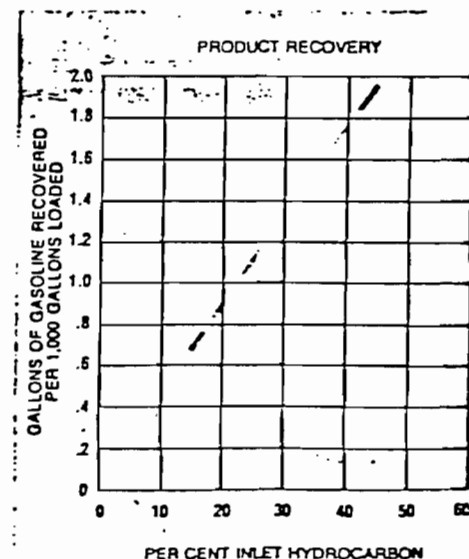
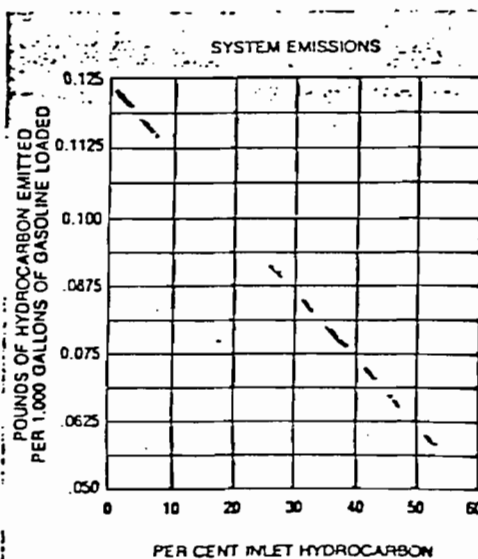
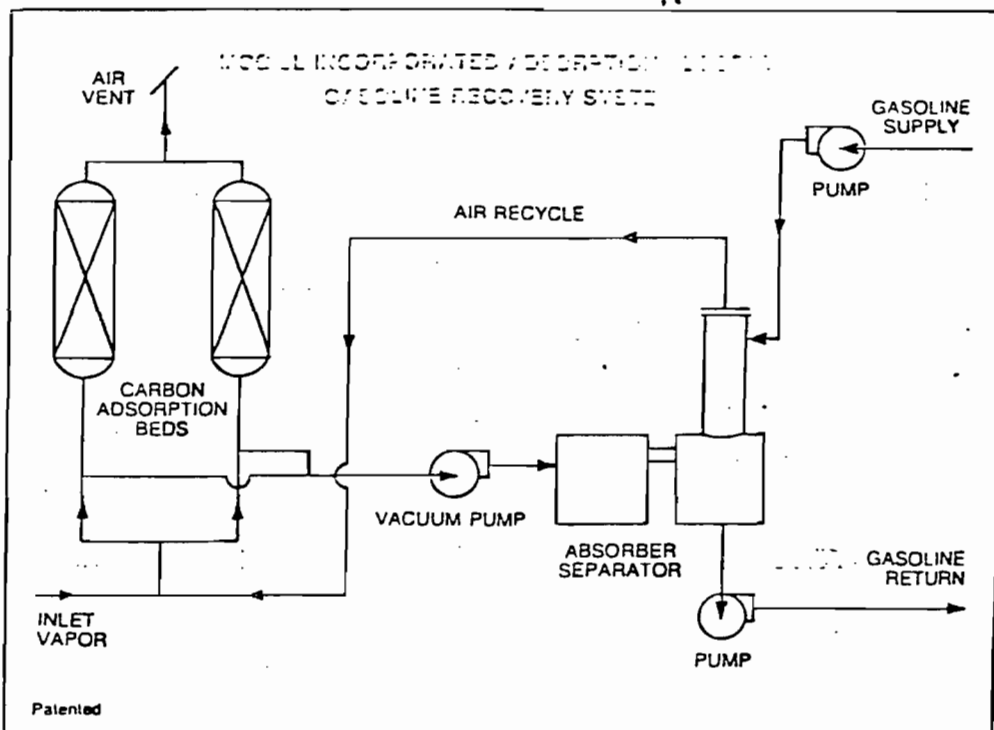
The basic operation utilizes dual activated carbon adsorption beds, which remove hydrocarbons from the incoming contaminated air. An absorber combines these hydrocarbons with gasoline from the bulk storage tank. The combined hydrocarbons and gasoline are then circulated back into the original storage tank.

Under normal conditions, the vented air from the McGill system contains less than 3000 ppm (v) of hydrocarbons, producing a clean air vent with over 99% of the fumes removed from the inlet vapor.

The "Patented McGill" Gasoline Vapor Recovery System

McGill Incorporated developed the carbon Adsorption/Absorption Vapor Recovery System in 1976. And we patented it. It meets all EPA standards. It is working for many satisfied customers at refineries and bulk gasoline loading terminals. It is a remarkable success. By 1977 this patented system made McGill the undisputed industry leader in the gasoline vapor recovery field. This was no fluke or accident. But a direct result of the way we think; the way we approach a problem. With simplicity.

The simplest design is normally the most difficult to engineer. That's why so few process systems manage to incorporate this basic virtue. But McGill has always been dedicated to doing what no one else could do. We achieved simplicity. And simplicity means ease of operation, reliability, reduction of maintenance. It also means minimum operating expense, maximum operating efficiency. Is it any wonder a company would patent such a design?



ADSORPTION/ABSORPTION GASOLINE RECOVERY SYSTEM

PROCESS DESCRIPTION

STEP 1 - EQUALIZE -

In Step 1, air contaminated with gasoline fumes (inlet vapor) flows from a loading or storage facility to two carbon adsorption beds, "A" and "B". Bed "B" has been receiving inlet vapor for several minutes and a considerable portion of the carbon is saturated with recovered hydrocarbon. Bed "A" has just completed a regeneration process and has little recovered hydrocarbons adsorbed on its carbon. The air portion of the inlet vapors flows from beds "A" and "B" and to the atmosphere. Under normal conditions, this air contains less than 3000 ppm (v) of hydrocarbons (over 99% of the fumes have been removed from the inlet vapor to produce the clean air vent).

A liquid ring vacuum pump operates continuously while the system operates. The suction of the vacuum pump during the "Equalize Step" is atmospheric air which is drawn into the system across the minimum flow valve. Motive force for the liquid ring vacuum pump is water which is separated from the air in the separator and flows through the cooler and back to the vacuum pump. The cooler is a shell and tube heat exchanger which uses gasoline to cool the water. The air flows to the absorber after being separated from the water in the separator. The air is contacted with gasoline in the absorber and becomes saturated with hydrocarbons after which it passes out of the absorber and flows back to beds "A" and "B" after mixing with inlet vapor.

The gasoline which provides cooling in the cooler and contact with air in the absorber is pumped from gasoline storage. After passing through the cooler and absorber, the gasoline flows to a chamber of the separator which is separated from the vacuum pump cooling water by a weir. From this chamber, the gasoline is pumped back to the storage tank from which it was drawn originally.

STEP 2 - "A" BED PROCESSING
"B" BED REGENERATING

In Step 2, all of the inlet vapor is directed through bed "A" by closing the inlet valve of bed "B". The outlet valve of bed "B" is also closed, and the suction valve which connects bed "B" to the liquid ring vacuum pump is opened. Hydrocarbons which were adsorbed on the carbon in bed "B" are removed by application of vacuum. A portion of these hydrocarbons condense in the liquid ring vacuum pump and float on the vacuum pump cooling water surface. These heavy hydrocarbons flow over a weir which divides the chambers of the separator, mix with gasoline, and are pumped to gasoline storage.

A portion of the hydrocarbons which are vacuumed from bed "B" flow through the separator as vapors and pass up the absorber. These hydrocarbon vapors are absorbed into the gasoline and are also pumped back to gasoline storage. A small amount of air is also vacuumed from bed "B". This air passes through the absorber, is saturated with gasoline, and flows to the inlet vapor stream.

STEP 3 - "A" BED PROCESSING
"B" BED REGENERATING WITH PURGE

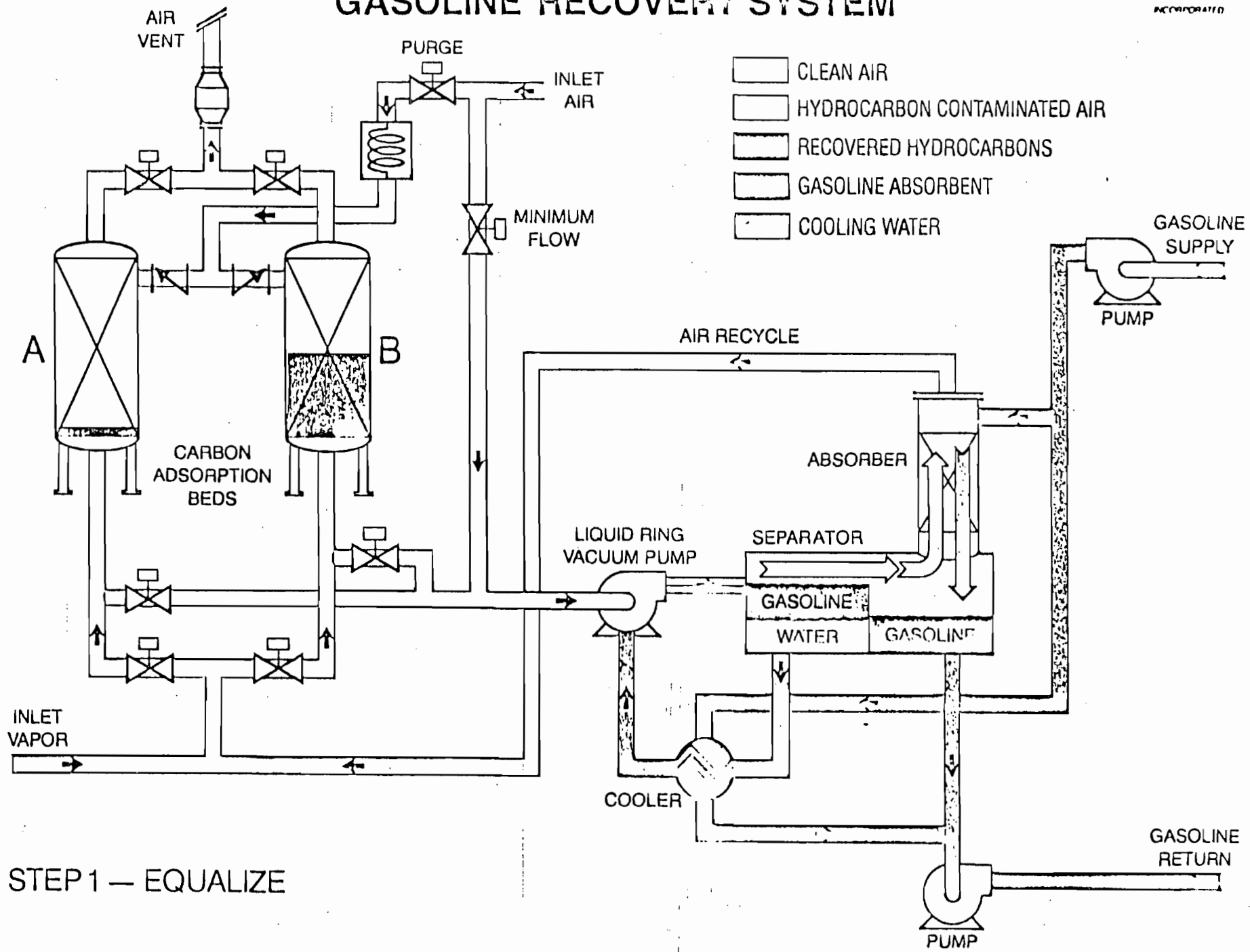
In Step 3, inlet vapors continue to flow only to bed "A" and hydrocarbons collect on the carbon surface. Most of the hydrocarbons have been removed from bed "B" and only the high boiling or "heavy" hydrocarbons remain on the carbon. The heavy hydrocarbons are removed from the carbon with hot air. The air flows from the atmosphere, across the purge valve, and through a heater. The heated air flows to bed "B" which is now at a pressure of about 25 mm Hg absolute. This hot air applied at low vacuum acts as a stripping agent to clean the heavy hydrocarbons from the carbon. The hydrocarbons removed by the hot air are blended into the gasoline as described in Step 2, and the hot air flows back to the inlet vapor line.

STEP 4 - EQUALIZE

Step 4 is identical to Step 1 except that bed "A" will be regenerated following Step 4. The system will continue to cycle for a short period of time after all loading stops in order to prepare the system for the next surge of loading.

HYDROTECH ADSORPTION — ABSORPTION GASOLINE RECOVERY SYSTEM

INCORPORATED



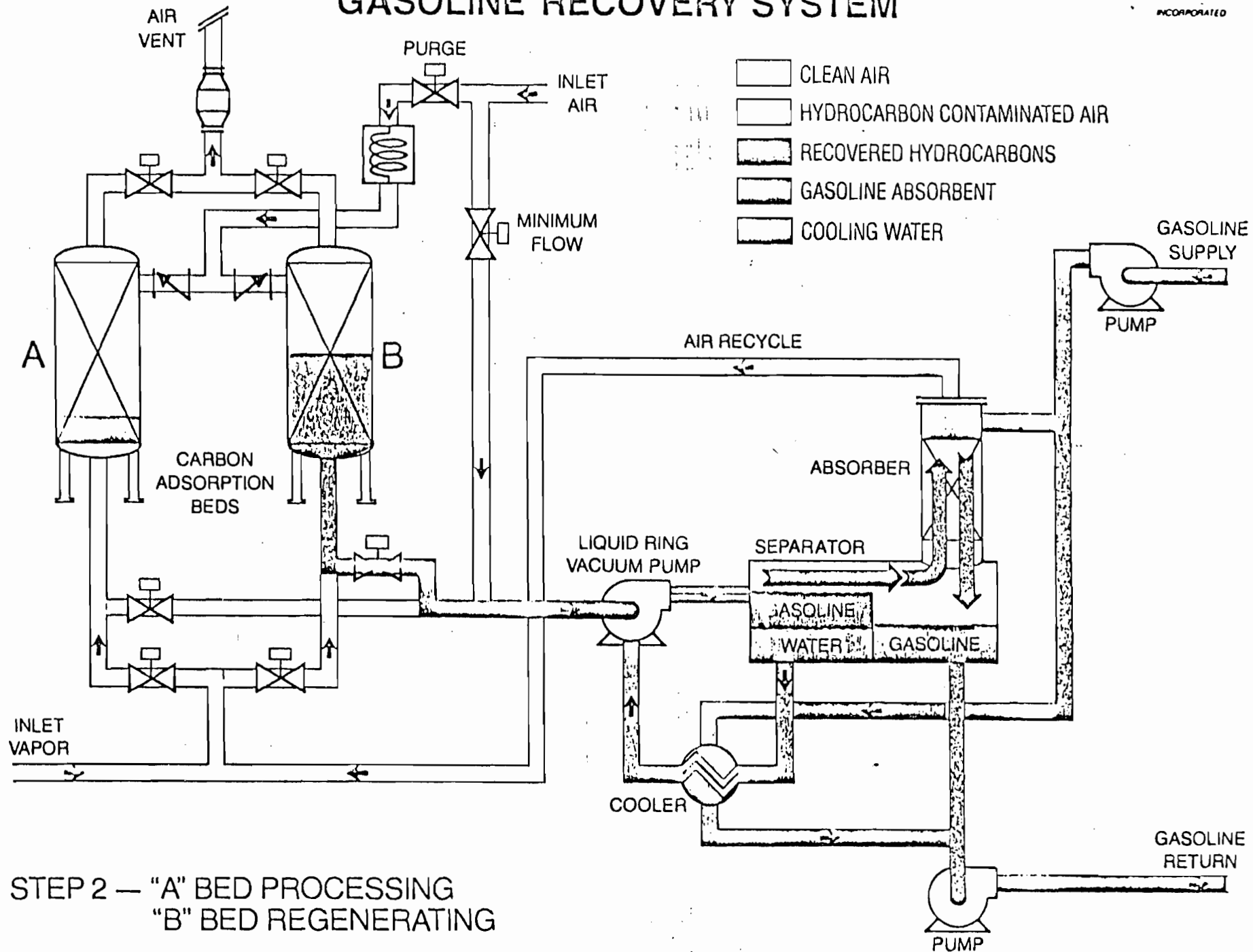
STEP 1 — EQUALIZE

PATENTED

INCORPORATED

HYDROTECH ADSORPTION – ABSORPTION GASOLINE RECOVERY SYSTEM

INCORPORATED

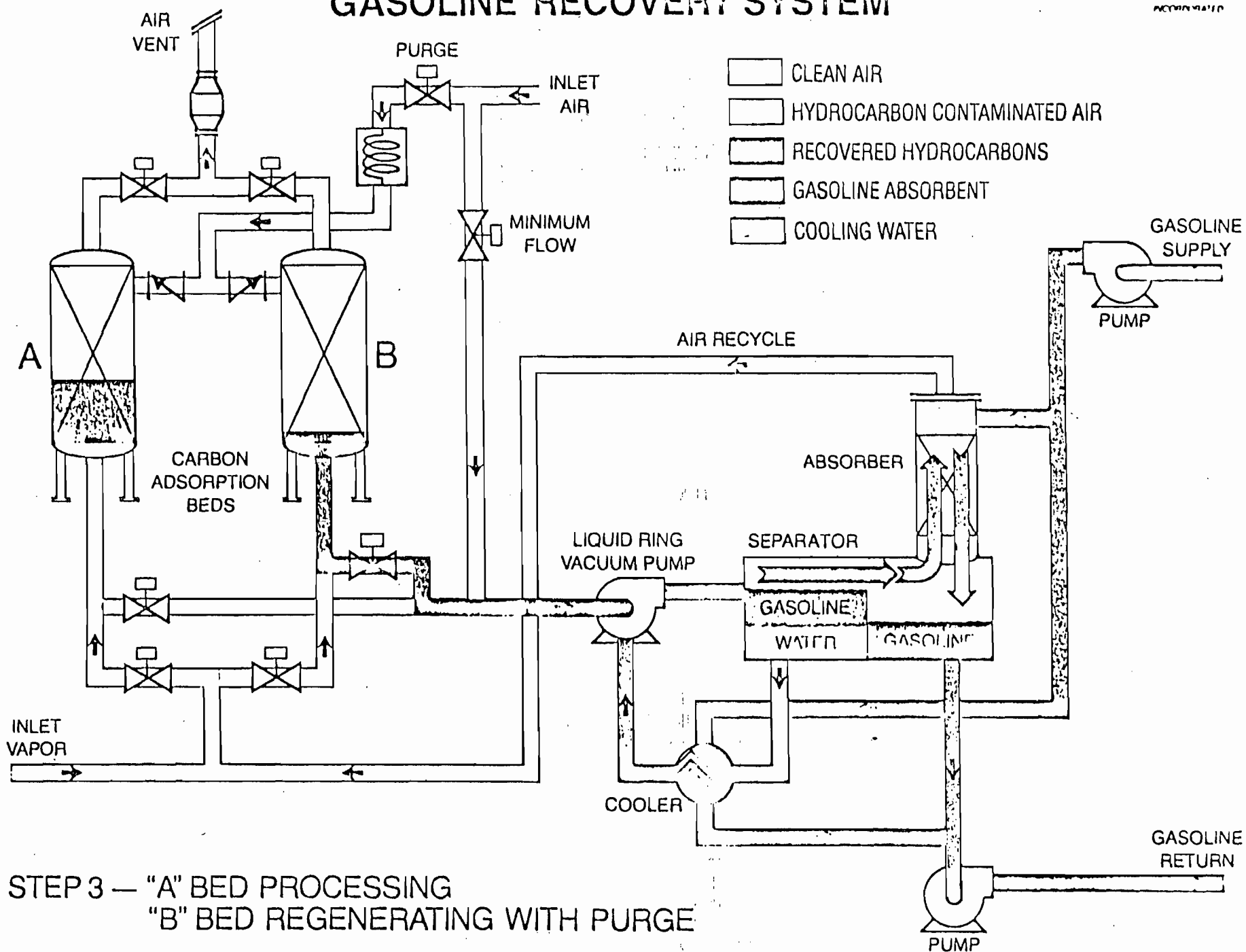


PATENTED

© MCGILL INCORPORATED 1979

HYDROTECH ADSORPTION — ABSORPTION GASOLINE RECOVERY SYSTEM

ACORN 11/1/79



ATTACHMENT 2

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

August 6, 1982

Mr. P. W. Moldenhauer
Belcher Oil Company
P.O. Box 525500
Miami, Florida 33152

RE: Air Pollution Construction Permit Application for
Port Everglades Terminal

Dear Mr. Moldenhauer:

The referenced application (Permit No. AC 06-58230) has been received at the Bureau of Air Quality Management office in Tallahassee for processing.

The application has been determined incomplete until receipt of additional information. Processing of the application will resume when the questions outlined below have been answered.

As proposed in the application, the project is potentially subject to the Preconstruction Review Requirements of Section 17-2.510, Florida Administrative Code (FAC). This section requires application of Lowest Achievable Emission Rate (LAER) technology for major modifications to major emitting facilities. Our records show that the Port Everglades terminal is a major emitting facility as defined since it emits over 100 tons per year of Volatile Organic Compounds (VOC). The application proposes VOC emissions from the truck loading rack/vapor recovery system of 43.6 tons per year. A major modification, under the provisions of 17-2.510, would result in an increase in VOC emissions of 40 tons per year or more.

The rule calls for a summation of emission changes (increases and decreases) over the past five years to determine whether a significant net emissions increase has occurred, including the current proposal. For clarification of this aspect of the rule you should consult

Mr. P. W. Moldenhauer
August 6, 1982
Page Two

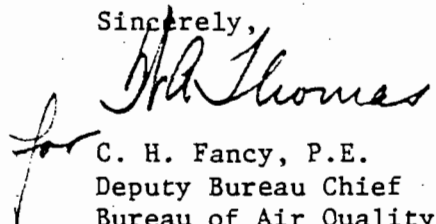
Section 17-2.510(2)(e), Emission Changes.

Please answer the following questions so that we may properly determine rule applicability for the project:

1. You must submit actual VOC emissions figures for each of the last five years based on throughput of petroleum products and tank emission calculations. The year of highest emissions will be used as a baseline from which a net emissions increase is tallied.
2. If a net emissions increase of 40 tons or over has occurred or will occur with the new project, please submit information according to 17-2.640, FAC, so that the Department may determine what LAER would be in this case.
3. On Page One of the attached calculations, gasoline loading losses are calculated using 600 gal/min maximum throughput flow per position. This flow rate appears to be that of one loading arm (or connection). In reality, maximum loading rate is determined by the number of trucks that can be filled in one hour per position, or lane, rather than maximum flow through the individual loading arms. Please clarify what the maximum loading capacity would be.

Please call my office if you have any questions concerning this matter.

Sincerely,


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

CHF/TP/bjm

cc: Gary Carlson, Broward County E.Q.C.B.
Jim Williams, FDER, SFS
Edward E. Clark, Clark Engineers - Scientists, Inc.

ATTACHMENT 3

CLARK

engineers-scientists

September 24, 1982

Mr. Bruce Mitchell
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

DER
SEP 27 1982
BAQM

Re: Belcher Oil Company,
Port Everglades -
Air Pollution Source
Permit for Vapor Recovery
Unit

Dear Mr. Mitchell:

The following information is in response to your letter of incompleteness regarding the Department of Environmental Regulation Air Pollution Source Construction Permit application required for the Vapor Recovery Unit to be installed at the Belcher Oil Company's Port Everglades terminal (Permit No. AC-06-58230).

The Air Pollution Source Operation Permit issued on November 13, 1981, for the Port Everglades terminal allows 176.5 tons of Volatile Organic Compound (VOC) emissions per year from this facility. Since this emission rate is greater than 100 tons per year of VOC's, this facility is considered a major emitting facility (Section 17-2.500(2)(d)2.b Florida Administrative Code (FAC)). A major emission modification for a major emitting facility re-releasing VOC's is considered to be an increase in net emissions equal to or greater than 40 tons per year (Section 17-2.500(2)(e)2 FAC).

The emissions that will result from the gasoline loading with a vapor recovery unit have been calculated and are presented in the attached calculation sheets. These calculations have been done using a recovery efficiency of 98% while the McGill Company states that over 99% removal of the fumes from the inlet vapor will be achieved utilizing this system.

The maximum loading rate has been determined according to the number of trucks that can be filled in one hour per loading position. Two loading positions will be used for gasoline service at this terminal. Therefore, assuming a maximum of 4 trucks loaded per hour per position, a maximum of 8 trucks can be filled per hour at the terminal. This rate of traffic results in a maximum hourly throughput rate of about 68,000 gallons per hour. This figure has been used in calculating the maximum hourly emissions at the loading racks.

CLARK

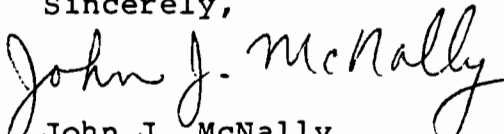
Mr. Bruce Mitchell
Bureau of Air Quality Management
September 24, 1982
Page Two

Considering the information presented above, the annual VOC emissions from the gasoline loading operations will be about 17.4 tons per year, while the maximum hourly emission rate is about 15.7 lbs/hour. Both of these emission rates reflect expected emission rates with application of the McGill Vapor Recovery Unit with a 98% recovery efficiency. These two emission rates are presented in the amended table (Application Section 111-C-Airborne Contaminants Emitted) which is attached along with the calculation sheets for these emissions.

This information should be sufficient in completing the construction permit application for the vapor recovery unit at the Belcher Oil Company's Port Everglades facility.

Please do not hesitate to contact me if you have any additional questions or comments regarding this application.

Sincerely,


John J. McNally

JJM:lf
8015.1
Encl.

cc: Mr. P. W. Moldenhauer, Belcher Oil Company
Mr. I. Goldman, DER

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): _____
2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: See Attachment A

Name of Contaminant	(1) Emission ¹		Allowed Emission ² Rate per Ch. 17-2, F.A.C.	(3) Allowable ³ Emission lbs/hr	(4) Potential Emission ⁴		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
Volatile Organic Compounds	15.7	17.4	Good practice in accordance with FAC section 17.2;	45.4	470.9	523.6	Loading Rack with VRU
	(calc sht. 2)		80 mg/l product loaded	(calc sht 3)	(calc sht 3)		

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)
Vapor Recovery Unit (McGill-Carbon Adsorption/Adsorption System - Model No. MRC-404HS)	V.O.C.	99*	Not Applicable	See Calc.

¹See Section V, Item 2.

²Reference 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)

³Calculated from operating rate and applicable standard

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

⁵If Applicable

* This efficiency value is based on manufacturer's specifications. Actual efficiency value used in calculations is 98%

ATTACHMENT A

Notes:

1. Column (1) represents maximum hourly emissions with pollution controls. Loading losses are based on maximum truck loading capacity for each loading position (4 trucks/hour).
2. Column (2) represents actual annual emissions for each product with pollution controls. Loading losses are based on actual annual product throughput rates.
3. Column (3) represents allowable loading emissions for gasoline (80 mg/l product loaded) based on maximum loading rack throughput for gasoline.
4. Column (4) represents maximum hourly emissions resulting from operations without pollution control. Loading losses are based on maximum truck loading capacity for each loading position.
5. Column (5) represents the potential annual emissions without pollution control equipment. Loading losses are based on actual product throughputs.

JOB Belcher Oil Co. JOB NO. 8015.1 COMPUTED BY JJM DATE 9/16/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit APS Permit SHEET 1 OF 3

Gasoline Loading Losses - Vapor Recovery Unit

Loading rack No. 4:

Vapor Recovery Efficiency = 98%

Design Throughput Flow: 300,000 bbls/mo

Maximum Hourly Throughput:

2 loading positions

4 trucks/position/hour (max loading rate)

∴ Max truck loading = $2 \times 4 = 8$ trucks/hour
8500 gallons/truck

∴ Max Hrly Flow = $(8 \times 8500) = 68,000$ gallons/hour

Loading Loss Equation:

$$L_L = 12.46 \frac{SPM}{T} \left(1 - \frac{EFF}{100}\right)$$

where:

L_L = loading loss; lbs/10³ gal liquid loaded

S = saturation factor = 0.60; submerged loading; normal dedicated service;
 $S = 1.0$ if VRU is used.

M = vapor molecular weight = 63.3 lb/lb-mole

T = 73°F = 533°R

EFF = control efficiency = 98%

P = vapor pressure = 7.8 psia, RVP = 12

- (1) Product data and loading rates from Belcher Oil Company
- (2) Loading loss equation from U.S. E.P.A. publication AP-42.

JOB Belcher Oil Company JOB NO. 8015.1 COMPUTED BY JJM DATE 9/16/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit APS Permit SHEET 2 OF 3

Section III Air Pollution Sources and Control
Devices - Airborne Contaminants
Emitted

Maximum Hourly Emission (w/ vapor recovery)

$$L_L = \frac{(12.46)(1.0)(7.8)(63.3)}{(533)} \frac{16}{(10^3 \text{ gal})} (1 - .98)(68,000 \text{ gal/hr})$$

$$L_L = \left(0.2308 \frac{\text{lbs}}{10^3 \text{ gal}} \right) (68,000 \text{ gal/hr}) = 15.7 \text{ lbs/hr.}$$

Actual Annual Emission (w/ vapor recovery)

$$L_L = \left(0.2308 \frac{\text{lbs}}{10^3 \text{ gal}} \right) (300,000 \text{ bbls/mo})(42)$$

$$L_L = 2908 \text{ lbs/month} = 34,897 \text{ lbs/yr}$$

$$L_L = \underline{17.4 \text{ tons/year}}$$

JOB Belcher Oil Comp. JOB NO. 8015.1 COMPUTED BY JJM DATE 9/16/82
DESCRIPTION Port Everglades - Vapor CHECKED BY KML DATE _____
Recovery Unit APS Permit SHEET 3 OF 3

Allowable Emission

$$L_{L \text{ Allowable}} = (80 \text{ mg/l}) \left(\frac{3.785 \text{ l}}{\text{gal}} \right) \left(\frac{16}{453,592 \text{ mg}} \right) (68,000 \text{ gal/hr})$$

$$L_{L \text{ Allowable}} = \underline{\underline{45.4 \text{ lbs/hr}}}$$

Potential Emission (no vapor recovery)

Maximum Hourly

$$L_L = \frac{(12.46)(0.6)(63.3)(7.8)}{533} \left(\frac{16}{10^3 \text{ gal}} \right) (68,000 \text{ gal/hr})$$

$$L_{L \text{ max}} = \left(\frac{6.9253}{10^3} \right) (68,000 \text{ gal/hr})$$

$$L_{L \text{ max}} = \underline{\underline{470.9 \text{ lbs/hr}}}$$

Annual Potential

$$L_{L \text{ Annual}} = \left(\frac{6.9253 \text{ lbs}}{10^3 \text{ gal}} \right) \left(300,000 \frac{\text{bbls}}{\text{mo}} \right) (12)(42)$$

$$L_{L \text{ Annual}} = \underline{\underline{1,047,105 \text{ lbs/yr.} = 523.6 \frac{\text{tons}}{\text{yr.}}}}$$

ATTACHMENT 4

5.2 Terminal Status During Test Period

The test procedure is designed to measure control system performance under conditions of normal operation. Normal operation will vary from terminal-to-terminal and from day-to-day. Therefore, no specific criteria can be set forth to define normal operation. The following guidelines are provided to assist in determining normal operation.

5.2.1 Closing of Loading Racks

During the test period, all loading racks shall be open for each product line which is controlled by the system under test. Simultaneous use of more than one loading rack shall occur to the extent that such use would normally occur.

5.2.2 Simultaneous use of more than one dispenser on each loading rack shall occur to the extent that such use would normally occur.

5.2.3 Dispensing rates shall be set at the maximum rate at which the equipment is designed to be operated. Automatic product dispensers are to be used according to normal operating practices.

5.3 Vapor Control System Status During Tests

Applicable operating parameters shall be monitored to demonstrate that the processing unit is operating at design levels. For intermittent vapor processing units employing a vapor holder, each test repetition shall include at least one fully automatic operation cycle of the vapor holder and processing device. Tank trucks shall be essentially leak free as determined by EPA Mobile Source Enforcement Division.

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

March 29, 1985

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Albin W. Smith
President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500


Dear Mr. Smith:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct two vertical lube oil tanks at your existing facility at Port Everglades, Broward County, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Broward 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 may be grounds for denial of the permit.

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

Sincerely,


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

CHF/pa
Attachments
cc: Michael K. Gleman, P.E.
Gary Carlson
Tom Tittle

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an)
Application for Permit by)
)
Belcher Oil Company) DER File No. AC 06-100328
Post Office Box 025500)
Miami, Florida 33102-5500)
)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Belcher Oil Company, applied on February 28, 1985, to the Department of Environmental Regulation for a permit to construct two new lube oil tanks that will replace one existing lube oil tank at Belcher Oil Company's existing facility at Port Everglades, in Ft. Lauderdale, Broward County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

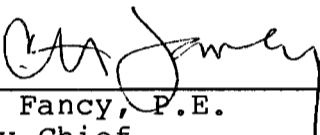
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 28 day of March, 1985, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Albin W. Smith, President
Belcher Oil Company
Post Office Box 025500
Miami, Florida 33102-5500

Michael K. Gleman, P.E.
Gleman Engineering Company
Post Office Box 3384
West Palm Beach, Florida 33402

Gary Carlson
Broward County Environmental
Quality Control Board
500 Southwest 14th Court
Ft. Lauderdale, Florida 33315

Tom Tittle
DER Southeast Florida District
Post Office Box 3858
West Palm Beach, Florida 33452

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on March 29, 1985.



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

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby acknow-
ledged.

Patricia G. Adams 3/29/85
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Belcher Oil Company to remove one (1) existing horizontal above-ground lube oil tank (20,000 gallons capacity) and to install two (2) new vertical above-ground lube oil tanks (30,000 gallons capacity each), in the space provided by the removed tank. The construction will take place at Belcher Oil Company's Port Everglades facility at 2401 Eisenhower Blvd., Ft. Lauderdale, Broward County, Florida. A determination of best available control technology (BACT) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and 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 constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Regulation
Southeast Florida District
3301 Gun Club Road
West Palm Beach, Florida 33402

Broward County Environmental Quality Control Board
500 Southwest 14th Court
Ft. Lauderdale, Florida 33315

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

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.

Technical Evaluation
and
Preliminary Determination

Belcher Oil Company - Port Everglades
Broward County
Ft. Lauderdale, Florida

Permit Number:
AC 06-100328

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
March 28, 1985

I. PROJECT DESCRIPTION

A. Applicant

Belcher Oil Company
Port Everglades
2401 Eisenhower Blvd.
Ft. Lauderdale, Florida 33152

B. Project and Location

The project consists of the removal of one (1) existing horizontal above-ground lube oil tank, designated Tank No. 11 (facility ID; 20,000 gallons capacity), and the installation of two (2) new vertical above-ground lube oil tanks, designated Tank Nos. 11 and 14 (30,000 gallons capacity each), in the space provided by the removed tank. Each tank will be constructed of steel and will have the approximate dimensions: 35 feet high and a diameter of 12 feet.

The existing facility is located at the above address with UTM coordinates of Zone 17, 587.3 km East and 2,886.3 km North.

The Source Classification Codes for each of the proposed new sources are 3-06-888-20.

C. Process and Controls

Lube oil will be loaded into and unloaded from the proposed new storage tanks. Total projected annual ~~throughput is~~ 840,000 gallons.

Even though the total estimated annual potential pollutant emissions are negligible, less than one pound per year hydrocarbons, general maintenance and pollution preventive measures will be required.

II. RULE APPLICABILITY

The proposed construction is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (FAC) Rules 17-2 and 17-4.

The application package was complete on February 28, 1985.

The existing bulk gasoline terminal is located in Broward County, which is an area designated nonattainment for the pollutant ozone in accordance with FAC Rule 17-2.410(1)(c). Volatile organic compounds (VOC) are precursors to ozone.

The existing facility is a major facility for VOC in accordance with FAC Rule 17-2.100(98).

According to FAC Rule 17-2.210, any source which emits or can reasonably be expected to emit any air pollutant shall obtain a permit from the Department prior to beginning construction or operation of the source unless exempted pursuant to Department rule or statute.

The proposed new sources will be emitting the pollutant hydrocarbon (HC) in accordance with FAC 17-2.100(78). The total projected annual potential HC emissions in pounds per year (lbs/yr) from the two new lube tanks are in the following table:

Source	Annual Potential HC Emissions (lbs/yr)		
	Working Loss	Breathing Loss	Total
Lube Storage Tanks (2)	0.009 (total)	0.151 (total)	0.16

Note: ° Based on 840,000 gallons per year total throughput

The proposed sources' potential pollutant emissions will be reviewed in accordance with FAC Rule 17-2.510, New Source Review for Nonattainment Areas. The projected HC emissions (0.16 lbs/yr) are less than the significant emission levels (40 TPY VOC) listed in Table 500-2 pursuant to FAC Rule 17-2.510(2)(e)2.. Therefore, the proposed new sources' potential pollutant emissions are not subject to the provisions of FAC Rule 17-2.510 and are subject to the provisions of FAC Rule 17-2.520, Sources Not Subject to the Prevention of Significant Deterioration of Nonattainment Requirements.

Since there is not a specific emission limiting and performance standard for the proposed new sources pursuant to FAC Rule 17-2.650(1), Reasonably Available Control Technology-Volatile Organic Compounds, the proposed construction shall be permitted in accordance with FAC Rule 17-2.620(1) and (2), General Pollutant Emission Limiting Standards.

III. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS

A. Emission Limitations

The regulated pollutant emissions from the proposed new lube oil storage tanks are hydrocarbons (HC), which are estimated to be less than a pound per year total (0.16 lbs/yr). Since there are no mass emission testing requirements contained in the applicable regulations, the sources shall only be regulated as to the petroleum product being stored, because they are to be constructed at an existing bulk gasoline/petroleum storage terminal.

The review of the projected potential HC emissions is in compliance with all applicable requirements of FAC Rule 17-2.

B. Air Quality Analysis

From a technical review of the application, the department has determined that the construction and operation of these sources will not have an impact on Florida's ambient air quality standards.

IV. CONCLUSIONS

The projected potential HC emissions have been determined to be acceptable by the department. There will be no controls associated with the sources other than crew efficiency to prevent spillage and to keep objectionable odors from reaching off-plant property. A monthly record of lube oil throughput shall be maintained, with an annual report to be submitted to the DER's Southeast Florida District office or its designee.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all applicable requirements of FAC Rule 17-2.

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:
Belcher Oil Company
Port Everglades Bulk Gasoline
Terminal
P.O. Box 525500
Ft. Lauderdale, Florida 33152

Permit Number: AC 06-100328
Expiration Date: March 31, 1986
County: Broward
Latitude/Longitude: 26° 05' 40" N/
80° 07' 39" W
Project: Construction of two vertical
30,000 gallon lube oil
storage tanks (Nos. 11 & 14)

This permit is issued under the provisions of Chapter 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 construction of two new vertical 30,000 gallon lube oil storage tanks, designated Tanks 11 and 14 (to be located at the site of an existing lube oil storage tank [No. 11], which is to be dismantled).

Construction shall be in accordance with the permit application and plans, documents, amendments and drawings, except as otherwise noted on pages 5 and 6 of the "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.202(1), and Michael K. Gleman's cover letter, received February 28, 1985.

PERMITTEE:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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.

PERMITTEE:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

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 petroleum product to be stored in Tanks 11 and 14 is lube oil.
2. The outside of each tank will be painted white.
3. Total projected throughput of both storage tanks is 840,000 gallons.
4. A monthly record of lube oil throughput shall be maintained, with an annual report to be submitted to the DER's Southeast Florida District office or its designee.

PERMITTEE:
Belcher Oil Company
Port Everglades

Permit Number: AC 06-100328
Expiration Date: March 31, 1986

SPECIFIC CONDITIONS:

5. Projected annual potential hydrocarbon (HC) emissions are:

Source	Annual Potential HC Emissions (lbs/yr)		
	Working Loss	Breathing Loss	Total
Tanks 11 and 14	0.009 (Total)	0.151 (Total)	0.16

Note: °Based on 840,000 gallons per year total throughput

6. Crew efficiency shall be utilized to prevent spillage of lube oil. Excessive spills shall be notified to the DER's Southeast Florida District office or its designee.

7. Objectionable odors shall not be allowed on off-plant property.

8. Prior to 90 days before the expiration date of this permit, a complete application for an operating permit shall be submitted to the DER's Southeast Florida District office or its designee. Full operation of the sources may then be conducted in compliance with the terms of this permit until the expiration date contained in this permit or receipt of an operating permit.

Issued this _____ day of _____,
19__.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION**

VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

ATTACHMENT 1

GLEMAN ENGINEERING COMPANY

324 DATURA STREET
POST OFFICE BOX 3384
WEST PALM BEACH, FLORIDA 33402
TELEPHONE (305) 655-0506

Feb. 21, 1985

State of Florida
Department of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, Fl. 32301-8241

Attn: Mr. Bruce Mitchell

Re: Construction Permit for Belcher Oil Company
New Lube Oil Tanks
Port Everglades, Florida
Your: AC 06-85700
AC 06-47127
AO 06-69488
Our: 84-101-1

DER
FEB 28 1985
BAQM

Gentlemen:

Enclosed are four (4) completed copies of DER form 17-1.202(1) for the construction of two (2) new lube oil tanks that will replace one (1) existing lube oil tank. The new tanks will be 30,000 gallons nominal capacity each, vertical type. The existing tank is a 20,000 nominal capacity, horizontal type.

Total throughput is estimated to be 20,000 BBLS/YR of lube oils. As you will see in the application, total estimated emissions will be practically negligible because of the very low vapor pressure. Calculations are enclosed.

Enclosed is a check in the amount of \$200.00 (\$100.00 per tank) for permitting fees. We trust this application and the attached information is sufficient. Please feel free to call regarding any questions or need for additional information.

Very truly yours,



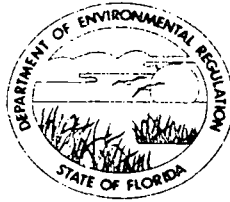
Michael K. Gleman, P.E.
President

MKG/ek
Enclosures
cc: Mr. Tommy Green - Belcher Oil

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHEAST FLORIDA
DISTRICT

3301 GUN CLUB ROAD
P.O. BOX 3858
WEST PALM BEACH, FLORIDA 33402



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ROY DUKE
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Petroleum Storage Facility New¹ Existing
APPLICATION TYPE: Construction Operation Modification
COMPANY NAME: Belcher Oil Company COUNTY: Broward

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) Vertical Lube Oil Tanks

SOURCE LOCATION: Street 2401 Eisenhower Blvd. City Ft. Lauderdale
UTM: East 587.3 KM North 2886.3 KM
Latitude 26 ° 05 ' 40 " N Longitude 80 ° 07 ' 39 " W

APPLICANT NAME AND TITLE: Mr. Albin W. Smith, President
APPLICANT ADDRESS: P.O. Box 025500, Miami, Fl. 33102-5500

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Belcher Oil Company

I certify that the statements made in this application for a modification 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: Albin W. Smith
Albin W Smith, President
Name and Title (Please Type)
Date: 2/25/85 Telephone No. (305) 551-5200

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

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

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.

Michael K. Gleman
2-21-85

Signed *Michael K. Gleman*

Michael K. Gleman, P.E.
Name (Please Type)

Gleman Engineering Company
Company Name (Please Type)

P.O. Box 3384, West Palm Beach, Fl. 33402
Mailing Address (Please Type)

Florida Registration No. 23175 Date: 2-21-85 Telephone No. (305) 655-0506

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.

Project consists of removal of one (1) existing horizontal aboveground lube oil (20,000 Gallons Capacity) and installation of two (2) new vertical aboveground lube oil tanks (30,000 gallons capacity each) in space provided by removed tank.

B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction March 1985 Completion of Construction September 1985

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.)
Tanks will be painted white at an estimated cost of \$2,200.00 each
(\$4,400.00 Total)

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

AC-06-85700
AO-06-47127 11-31-81 11-13-86
AO-06-69488

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;
if power plant, hrs/yr _____ ; if seasonal, describe: _____

F. 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? _____
 - 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 Deterioration" (PSD)
requirement 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? _____

- H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? _____ NO _____
- a. If yes, for what pollutants? _____
 - b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation 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		
---N/Aa--				

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

- Total Process Input Rate (lbs/hr): _____
- Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Hydrocarbon Vapor	Neg.	.160	N/A	.160	.160	.00008	

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

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

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

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Vertical Aboveground Steel Tank	Hydrocarbons	N/A	N/A	N/A
Paint Color = White	"	"	"	"
for Shell & Roof	"	"	"	"

E. Fuels ---N/A---

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: ---N/A---

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

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

Annual Average _____ Maximum _____

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

-----N/A-----

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

Stack Height: ----N/A---- ft. Stack Diameter: _____ ft.
 Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.
 Water Vapor Content: _____ % Velocity: _____ 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.)
Actual lb/hr Incinerated	-----NOT APPLICABLE-----						
Uncontrolled (lbs/hr)							

Description of Waste _____
 Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____
 Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____
 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.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
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, design pressure drop, 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 8 1/2" 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 8 1/2" 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 8 1/2" 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. The appropriate application fee in accordance with Rule 17-4.05. 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.

-----N/A-----

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: |

*Explain method of determining

- 5. Useful Life:
- 7. Energy:
- 9. Emissions:

- 6. Operating Costs:
- 8. Maintenance Cost:

Contaminant	Rate or Concentration

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:¹ d. Capital Cost:
- e. Useful Life: f. Operating Cost:
- g. Energy:² 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:¹ d. Capital Cost:
- e. Useful Life: f. Operating Cost:
- g. Energy:² h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.
²Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

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

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

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:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant 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 -----N/A-----

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂+ _____ 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.

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

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 of 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.

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.

GLEMAN ENGINEERING COMPANY

Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402
(305) 655-0506

JOB 84-101-1 PORT EVERGRADES
SHEET NO. 1 OF 2
CALCULATED BY MKG DATE FEB '85
CHECKED BY MKG DATE _____
SCALE BELCHER OIL COMPANY

EMISSION CALCULATIONS PER AP-42
FOR NEW LUBE OIL TANKS

PRODUCT: LUBE OILS

POLLUTANT: HYDROCARBON VAPORS

TANKS: VERTICAL STEEL ABOVEGROUND APPROX. 12' ϕ x 35' H.

THROUGHPUT: 20,000 BBLs/YR = 840,000 GALLONS/YR

1 WORKING LOSSES = $L_W = 2.40 \times 10^{-2} M P K_N K_C$

WHERE $M = 450$ lbs/lb mole

$P = 5.089 \times 10^{-7}$ psia

$K_N = 1.0$ for 15 \pm turnovers/year

$K_C = 1.0$ for organic liquids

$$\begin{aligned} L_W &= 2.40 \times 10^{-2} [450] [5.089 \times 10^{-7}] [1.0] [1.0] \\ &= 5.49 \times 10^{-6} \text{ lbs/yr per 1000 gals throughput per tank.} \\ &= 1.099 \times 10^{-5} \text{ lbs/yr per 1000 gals throughput both tanks.} \\ &= 9.23 \times 10^{-3} \text{ lbs/yr. for total throughput of} \\ &\quad \text{840,000 gals.} \end{aligned}$$

$$L_W = .00923 \text{ lbs/yr.}$$

2 BREATHING LOSSES = L_B

$$L_B = 2.26 \times 10^{-2} M \left[\frac{P}{14.7 - P} \right]^{.68} D^{1.73} H^{.51} \Delta T^{.50} F_p C K_c$$

$M = 450$

$P = 5.089 \times 10^{-7}$

$H = 17.5$ FT. (1/2 FULL)

$\Delta T = 20^\circ$ F

$F_p = 1.0$ for white paint

$C = .62$

$K_c = 1.0$

GLEMAN ENGINEERING COMPANY

Post Office Box 3384
WEST PALM BEACH, FLORIDA 33402
(305) 655-0506

JOB 84-101-1 PORT EVERGLADES
SHEET NO. 2 OF 2
CALCULATED BY MKG DATE FEB'85
CHECKED BY MKG DATE _____
SCALE BELCHER OIL COMPANY

$$L_B = 2.26 \times 10^{-2} [450] \left[\frac{5.089 \times 10^{-7}}{14.7 - 5.089 \times 10^{-7}} \right]^{.68} [12.0]^{1.73} [17.5]^{.51} [20]^{.50} [.62]$$

$$= .076 \text{ lbs/yr per tank}$$

$$L_B = .151 \text{ lbs/yr both tanks}$$

$$\boxed{3} \quad \text{TOTAL LOSS} = L_B + L_W$$

$$= .151 + .009$$

$$\boxed{\text{TOTAL LOSS} = .160 \text{ lbs/yr}}$$

ADDENDUM TO
AIR POLLUTION SOURCE OPERATION
PERMIT APPLICATION
BELCHER OIL COMPANY
PORT EVERGLADES SERVICE TERMINAL

JUNE 11, 1980

ADDENDUM TO
 AIR POLLUTION SOURCE OPERATION
 PERMIT APPLICATION
 BELCHER OIL COMPANY
 PORT EVERGLADES SERVICE TERMINAL

Following is the additional information requested by the State Department of Environmental Regulation for the Belcher Oil Company Air Pollution Source Operation Permit Application which was submitted in April, 1980, for the Port Everglades Terminal.

● Heater Information

1. Location and Operating Schedule: (Attachment 1 in permit application)

There are three (3) Cleaver Brooks heaters which operate on diesel fuel oil No. 2. These heaters are located near tank 225 in the facility. Two of these heaters operate 24 hrs/day, 7 days/week, 52 weeks/year.

There are two (2) Cleaver Brooks heaters which operate on bunker C oil No. 6. Both of these heaters are operated 24 hrs/day, 7 days/week, 52 weeks/year. One of these heaters is located in the PM Tank Field near tank PM 6 and the other is located in the boiler room near tank 201.

2. Heater Fuel Usage (Section III-E)

The fuel type and consumption rate is indicated in the following table.

TABLE A - FUELS

Type	Consumption		Maximum Heat Input (MMBTU/hr.)
	<u>Avg</u>	<u>Max</u>	
diesel fuel No. 2	35 gal/hr.	52 gal/hr.	8.32
bunker C fuel No. 6	35 gal/hr.	52 gal/hr.	8.69

* Values represent operation of 2 burners in each case as indicated in operating schedule.

Best Available Control Technology applies to heater operation. State of the art burner design is utilized along with proper operating techniques and fuel quality.

3. Heater Emissions (See attached calculations)

TABLE B- EMISSIONS

Type	Fuel Type		Total (lb/hr)
	Diesel	Bunker C	
particulate	0.07 lb/hr	0.19	0.26
sulfur dioxide	1.74	13.74	15.48

4. Emission Stack and Flow Geometry

Each of the heaters has a separate exhaust stack. There are three (3) stacks serving the diesel fueled heaters and two (2) stacks for the bunker C fueled heaters. The dimensions and flow rates for these stacks are as indicated below.

	Diesel (3 stacks)	Bunker C (2 stacks)
Stack Height (ft)	20	20
Gas Flow Rate (ACFM)	170	590
Stack Diameter (ft)	1.0 I.D.	1.5 I.D.
Exit Velocity (ft/sec)	36.1	5.6

• Loading Racks

There are seven (7) loading docks within the facility used for product transfer. The products and the number of trucks handled at each loading dock are indicated on the following page. Loading rack 7 is used for inflow of crude oil supplied by truck. This inflow rack supplements product inflow by pipeline.

TABLE C - LOADING RACKS

<u>Dock Number</u>	<u>Product</u>	<u>Trucks/Dock</u>
1	Diesel, Bunker "C", Beloil	6
2	RC-70	1
3	JP-4	4
4	Jet A	1
5	Gasoline	1
6	Asphalt	2
7 - inflow	Crude Oil	2

• Asphalt Products and Lube Oil

Due to the fact that this is a service terminal, there is a variation in the products handled at the facility. The nature of the above products varies depending on the product constituents. Based on our discussion with the American Petroleum Institute and the manufacturer, the vapor pressure of the above products is less than .0019 psia. at standard conditions and are therefore not considered volatile organic compounds.

The throughput for these products is shown in the following table.

TABLE D

<u>Product</u>	<u>Throughput (bbls/yr)</u>
AC-20	856,141
RC-70	93,136
Lube Oil	13,623

● Residual Fuel Oils

Because of the very low vapor pressure of the Bunker "C" and Boleil fuel oils, these products are not classified as volatile organic compounds. The emissions due to these products should not be included in the values representing the airborne contaminants (Section III-C). Below is the table from Section III-C of the application showing the revised airborne contaminant totals. Attached is a revised copy of Table 2 listing the products and throughputs at the terminal and the losses not including the Bunker C and Boleil emissions.

1111

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	
Breathing loss	38.70	169.5	Good Practice	38.70	38.70	169.5	tanks
Working loss	1.49	6.5	in accordance	1.49	1.49	6.5	tanks
Loading loss	1.75	7.7	with FAC Section 17.2	1.75	1.75	7.7	loading racks
Heaters (particulate)	0.26	1.14	Latest Technology	0.26	0.26	1.14	heaters
Heaters (SO ₂)	15.48	67.8	per 17-2.03(1)	15.48	15.48	67.8	heaters

TABLE #2: SUMMARY TABLE OF PRODUCTS, FLOWS AND LOSSES

PRODUCT	TANK NO. (type)	CAPACITY (barrel)	THROUGHPUT (bbl/yr)	INPUT (bbl/yr.)			OUTPUT (bbl/yr.)			LOSSES (lb/yr.)			
				Ship	Pipe	Truck	Ship	Pipe	Truck	Breathing	Working	Loading	Total
Bunker C ^a (No. 6 oil)	201 C	81,120	3.913 x 10 ⁶	3,695,963	-----	-----	3,794,299	-----	336,611	7,979 ^a	300.4 ^a	13.73 ^a	8,293 ^a
	202 C	80,772											
	PM2 C	96,024											
	PM3 C	96,501											
	PM5 C	95,874											
	PM6 C	96,133											
		546,374											
Diesel (No. 2 oil)	204 C	15,084	1.562 x 10 ⁶	1,603,810	-----	20,903	079,931	-----	619,068	40,735	2,456	562	43,756
	PM1 C	95,833											
	PM7 C	96,403											
	PM0 C	96,603											
	PM11 C	96,017											
		399,340											
Jet Naptha (JP-4)	211 IP	54,247	1.066 x 10 ⁶	875,626	-----	-----	-----	1,163,700	92,500	74,497	1,204	8,183	83,884
	215 F	80,405											
	216 F	80,501											
	217 F	60,509											
	219 F	80,510											
		376,258											
Crude Oil	203 F	29,392	4.680 x 10 ⁶	-----	4,685,741	-----	4,673,709	-----	-----	65,408	5,131	0	70,539
	205 IP	92,460											
	223 F	119,649											
	224 F	119,600											
		331,917											
Gasoline	212 IP	51,361	1.5 x 10 ⁶	1,546,092	-----	-----	-----	1,497,489	21,336	134,138	1,847	6,459	142,444
	213 F	53,866											
	214 F	53,898											
	220 IP	41,079											
		201,004											
Jet Kerosene (Jet A)	207 F	55,000	1.424 x 10 ⁶	1,663,795	-----	-----	-----	1,073,771	109,602	24,269	2,372	124.2	26,765
	210 F	80,552											
	PM4 C	95,060											
	PM10 C	96,427											
		326,979											
Reloil ^a (No. 5 oil)	210 C	20,069	7.3 x 10 ⁴	-----	58,827	-----	-----	-----	87,256	126.8 ^a	12.6 ^a	1.0 ^a	140 ^a
		2,231,327	14,217,204	9,385,286	4,744,568	20,903	9,347,939	3,735,040	2,266,461	339,050 ^b	13,010 ^b	15,328 ^b	367,388 ^b

(Revised 6/11/80)

a- Emissions due to these products are not included in total values for hydrocarbon emissions due to their low vapor pressure values (vapor pressure less than 0.0019 psia).
b- Emission Loss Totals do not include losses due to Bunker C and Reloil.

C - cone roof tank (fixed)
F - floating roof tank
IP - internal floating pan

EDWARD E. GLANN ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil JOB NO. 8015 COMPUTED BY JM DATE 7/6/80
DESCRIPTION Air Pollution Source Operating CHECKED BY _____ DATE _____
Permit Application SHEET 1 OF 2

Emissions for Fuel Oil Combustion

Diesel Fuel (2 heaters operating; avg fuel rate = 35 gal/hr)
(total)

1) particulate

$$\% \text{ Sulfur} = 0.35$$

$$f_{\text{part.}} = 2 \text{ } 10^3 \text{ gal}$$

$$E_{\text{part.}} = (2.0 \text{ } 10^3 \text{ gal}) (35 \text{ gal/hr}) \left(\frac{8736 \text{ hr}}{\text{yr}} \right)$$

$$E_{\text{part.}} = 612 \text{ } 10^3 \text{ gal/yr} = 0.07 \text{ } 10^6 \text{ gal/yr} = 0.31 \text{ tons/yr}$$

2) sulfur dioxide

$$f_{\text{SO}_2} = 142 (.35) = 49.7 \text{ } 10^3 \text{ gal}$$

$$E_{\text{SO}_2} = (49.7 \text{ } 10^3 \text{ gal}) (35 \text{ gal/hr}) \left(\frac{8736 \text{ hr}}{\text{yr}} \right)$$

$$E_{\text{SO}_2} = 15,196 \text{ } 10^3 \text{ gal/yr} = 1.74 \text{ } 10^6 \text{ gal/yr} = 7.60 \text{ tons/yr}$$

INTERNATIONAL B. OF A.P.I.C. ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil JOB NO. 8015 COMPUTED BY JM DATE 3/9/80
DESCRIPTION Air Pollution Source Operating CHECKED BY _____ DATE _____
Permit Application SHEET 2 OF 2

Bunker C Oil (No. 6)

(2 heaters operating; avg combined fuel rate = 35 gal/hr)

1.) particulate % S = 2.5

$$f_p = 10(2.5) + 3 = 5.5 \text{ lb}/10^3 \text{ gal}$$

$$E_{\text{part}} = (5.5 \text{ lb}/10^3 \text{ gal})(35 \text{ gal/hr})(8736 \text{ hr/yr})$$

$$E_{\text{part}} = 1,682 \text{ lb/yr} = 0.19 \text{ lb/hr} = 0.84 \text{ tons/yr}$$

2. sulfur dioxide

$$f_{\text{SO}_2} = 157(2.5) = 392.5 \text{ lb}/10^3 \text{ gal}$$

$$E_{\text{SO}_2} = (392.5 \text{ lb}/10^3 \text{ gal})(35 \text{ gal/hr})(8736 \text{ hr/yr})$$

$$E_{\text{SO}_2} = 120,011 \text{ lb/yr} = 13.74 \text{ lb/hr} = 60.0 \text{ tons/yr}$$

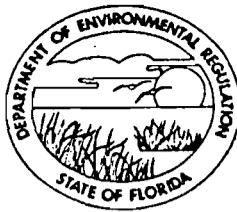
Total Combustion Emissions

$$\text{Particulate Emissions} = 0.26 \text{ lb/hr} = 1.15 \text{ tons/yr}$$

$$\text{Sulfur Dioxide Emissions} = 15.48 \text{ lb/hr} = 67.60 \text{ tons/yr}$$

Emissions are for operation of 2 Diesel fueled heaters and 2 Bunker C fueled heaters operated according to the schedule in Attachment 1.

3301 GUN CLUB ROAD
P.O. BOX 3858
WEST PALM BEACH, FLORIDA 33402



T/E

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

WARREN G. STRAHM
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA SUBDISTRICT

RECEIVED

MAY 6 1980

May 1, 1980

Mr. E. J. Travers
Belcher Oil Company
Post Office Box 011751
Miami, Florida 33101

E. J. TRAVERS

Dear Mr. Travers:

Re: Application for Permit to Operate Air Pollution Source

The above referenced material has been received in this office. It cannot be considered an acceptable application for further Department review because it lacks the following:

- Signature of applicant.
- Letter of authorization (if application is signed by other than applicant).
- Professional Engineer's seal (raised). (Please use metal embosser on applications instead of rubber stamp.)
- Processing fee in the amount of \$20.00 (check made payable to the Department of Environmental Regulation).
- Enclosures called out but not included.
- Other:

When the referenced material contains the items checked, the package will be assigned a number and officially entered on Department records. At that time technical review for completeness will begin. The Department is allowed thirty days from date of official receipt for the completeness review of your application. This office has set a target for itself of ten (10) working days.

~~If you've been unable to provide the item(s) checked to the receptionist at this office by _____, the referenced material will be returned to you by mail*.~~

Sincerely,

Warren G. Strahm
Subdistrict Manager

WGS:fs

cc: Roy Duke
Local Program (BCEQCB)
PATS Operator
F. Stone

~~* With the exception of bulky attachments which will be held for 30 days for your pick-up.~~

April 22, 1980

Mr. Peter Moldenhauer
Corporate Engineer
Belcher Oil Company
Post Office Box 011751
Miami, Florida 33101

Re: Permit for Port Everglades
Bulk Gasoline Terminal and
Petroleum Liquid Storage
Vessels.

Dear Mr. Moldenhauer:

Enclosed please find the completed Air Pollution Source Permit Application required by the State Department of Environmental Regulation. At this time, there are several points of information that should be brought to your attention.

- 1) A construction permit application for the installation of a vapor recovery system is required by July 1, 1980 and compliance with applicable standards is required by July 1, 1981.
- 2) Adjustment of the saturation factor used to calculate the loading losses will be necessary when calculating the loading losses from the the loading racks after the vapor recovery system is installed.
- 3) It is possible that the Department of Environmental Regulation may set total emission limits in the permit. A new permit would be required if the emissions exceed these limits. This procedure would also be followed for the emissions from the loading racks.
- 4) Although asphalt cutback products are not of concern in the present permit, the owner or operator is required to abide by the applicable regulations for the activities.

CLARK

Mr. Peter Moldenhauer

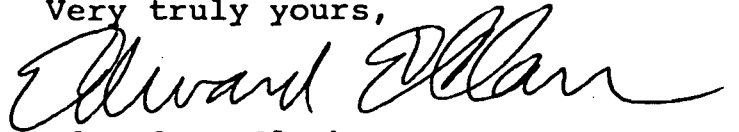
Page 2

April 22, 1980

- 5) In accordance with state law, all air pollution sources are required to have a current valid State Air Pollution operation permit. As a result, all petroleum terminals are included within this regulation and will be receiving notification from the State.

It has been a pleasure providing these services for you and we look forward to working with you in the future. Please do not hesitate to contact us if you have any questions or comments.

Very truly yours,



Edward E. Clark, Ph.D., P.E.

EEC:dlr

AIR POLLUTION SOURCE
OPERATION PERMIT APPLICATION
FOR
BELCHER OIL COMPANY
PORT EVERGLADES SERVICE TERMINAL
APRIL 22, 1980

CLARK

engineers-scientists

April 22, 1980

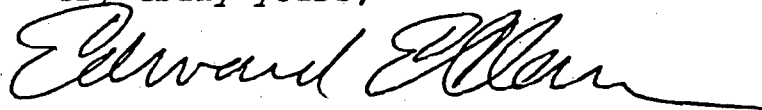
Mr. Peter Moldenhauer
Corporate Engineer
Belcher Oil Company
P.O. Box 011751
Miami, Florida 33101

Dear Mr. Moldenhauer:

Edward E. Clark Engineers-Scientists, Inc., is pleased to submit this Air Pollution Source Permit Application for the Port Everglades service terminal. The work was conducted in accordance with our agreement for professional services dated March 12, 1980.

We appreciate the fine cooperation and assistance provided by you and your staff throughout the preparation of this application.

Very truly yours,



Edward E. Clark, Ph.D., P.E.

JJM:EEC:pm

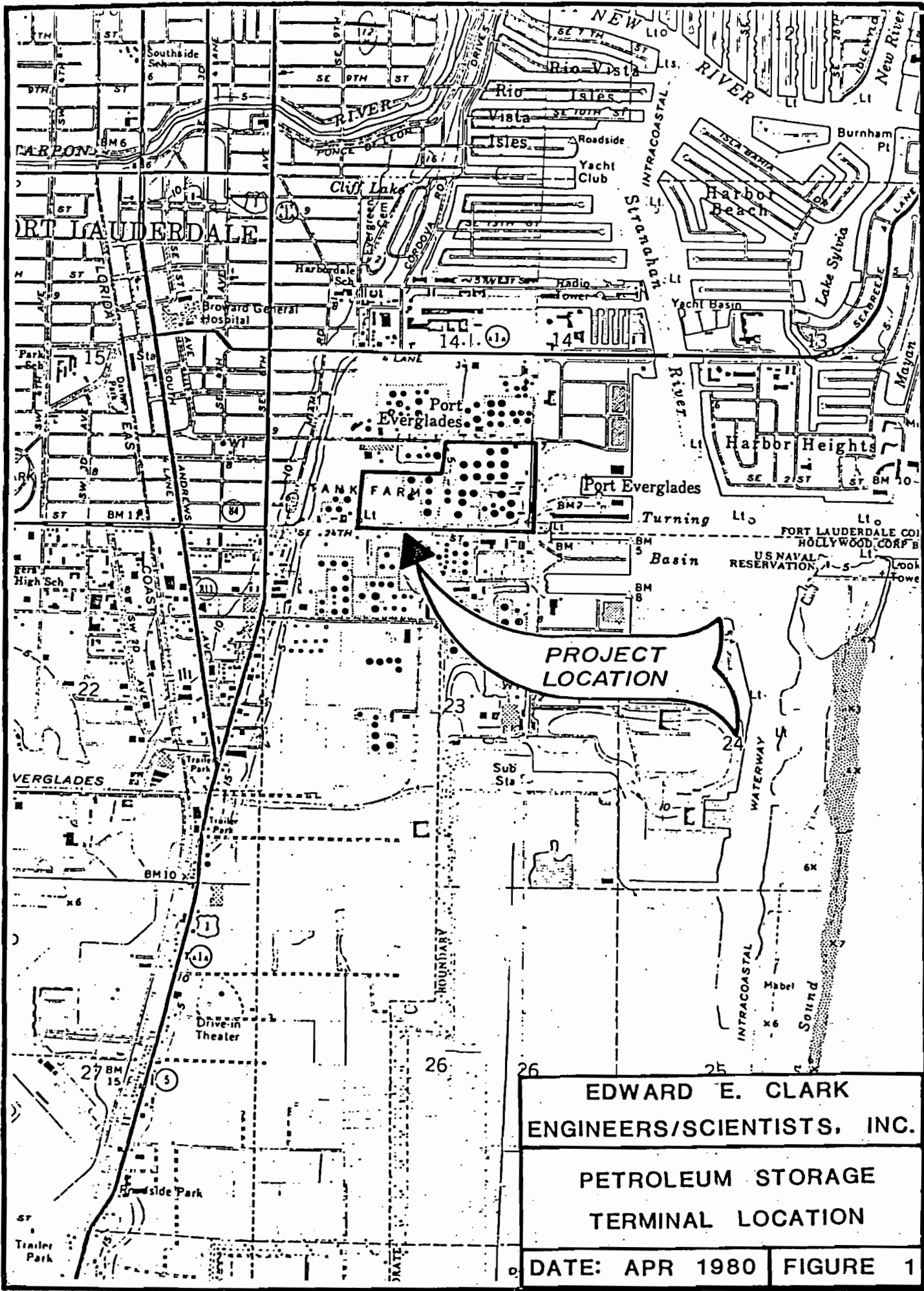
INTRODUCTION

Belcher Oil Company operates a petroleum service terminal at Port Everglades, Florida. The location of the storage field is indicated on figure 1. Due to the products dealt with at the terminal, the State Department of Environmental Regulation requires the owner of the facility to submit an Air Pollution Source Operation Permit Application.

Edward E. Clark Engineers-Scientists, Inc., as consulting engineers for Belcher Oil Company, has prepared this document. It is composed of the following two sections and includes all necessary information to facilitate the Departments's review.

- (1) Section One: Application to Operate/Construct Air Pollution Sources.
- (2) Section Two: Summary Table and calculations of evaporative losses associated with the service terminal.

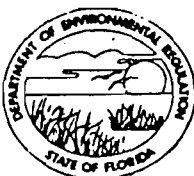
Since the facility operates as a service terminal, the tank contents and throughput flows vary depending upon product demands. The calculations in this report are based on annual values which are representative of the products and demands at the present time.



SECTION I

APPLICATION TO OPERATE/CONSTRUCT
AIR POLLUTION SOURCES

(DER Form 17-1.122(16))



STATE OF FLORIDA
 DEPARTMENT OF ENVIRONMENTAL REGULATION
 APPLICATION TO OPERATE/CONSTRUCT
 AIR POLLUTION SOURCES

SOURCE TYPE: Petroleum Service Terminal New¹ Existing¹
 APPLICATION TYPE: Construction Operation Modification
 COMPANY NAME: Belcher Oil Company COUNTY: Broward

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) 38 storage tanks; 5 heaters; 7 loading racks

SOURCE LOCATION: Street _____ City _____
 UTM: East 587.323 km North 2886.279 km
 Latitude 26 ° 05 . 40 "N Longitude 80 ° 07 . 39 "W

APPLICANT NAME AND TITLE: E.J. Travers, Vice President Operations
 APPLICANT ADDRESS: P. O. Box 011751, Miami, Florida 33101

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Belcher Oil Company

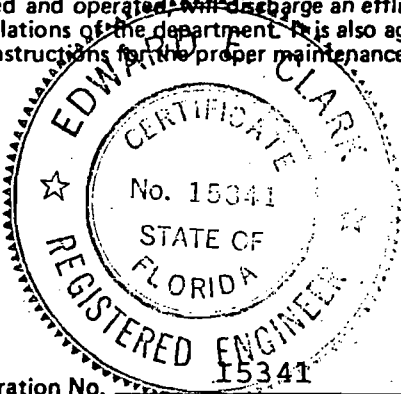
I certify that the statements made in this application for a air pollution source operating permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply 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: _____
E. J. Travers, Vice President Operations
 Name and Title (Please Type) _____ tions
 Date: _____ Telephone No. (305) 858-3400

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: Edward E. Clark
 Edward E. Clark
 Name (Please Type) _____
Edward E. Clark Engineers-Scientists, Inc
 Company Name (Please Type) _____
7520 S.W. 57th Ave., Suite A, Miami,
 Mailing Address (Please Type) Florida 33143
 Date: 4/22/80 Telephone No. (305) 665-5736

Florida Registration No. 15341

¹See 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.
Project includes existing petroleum liquid storage facility and bulk gasoline terminal. This facility includes both fixed and floating roof tanks, heaters, and loading racks. (For further details refer to attachment No. 1, figure 2 and table 1)

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.
N/A

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 No

F. Normal equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ; if power plant, hrs/yr - ;
 if seasonal, describe: These operating times are for the heaters.

- 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? | <u>Yes</u> |
| a. If yes, has "offset" been applied? | <u>N/A</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>N/A</u> |
| c. If yes, list non-attainment pollutants.
<u>Ozone (V.O.C.)</u> | |
| 2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. | <u>No</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD) requirements apply to this source? If yes, see Sections VI and VII. | <u>No</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? | <u>No</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? | <u>No</u> |

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

ATTACHMENT NO. 1

AIR POLLUTION SOURCE PERMIT APPLICATION

Section II - A General Project Description

1) Storage Tanks:

38 fixed roof and floating roof tanks - containing a variety of petroleum products. (Gasoline, diesel #2 oil, bunker #6 oil, crude oil, jet naphtha, jet kerosene, lube oil, and asphalt products - AC-20, RC-70.) See Table #1.

2) Loading Racks:

7 loading racks included in facility for product distribution by truck.

3) Heaters:

3 diesel #2 Cleaver Brooks heaters -
2 operated 24 hrs./day, 7 days/week,
52 weeks/year.

2 bunker #6 Cleaver Brooks heaters -
2 operated 24 hrs./day, 7 days/week,
52 weeks/year.

These heating units are used to heat asphalt and bunker C oil. The heat input is far below the size for which regulations on emissions apply in Section 17-2.05(6) of the FAC. (250 million BTU/hr.)

Note: Vapor Pressure of asphalt products and lube oil is below limit set forth in 17-2.16(6)(h) 1.a of F.A.C. and have not been included in calculations since the emissions attributed to these products are negligible. Although the jet kerosene, diesel oil #2, and bunker #6 oil also have vapor pressures below the limit, the emissions from these products are not negligible due to the volume present. These conclusions resulted from use of the equations in AP-42.

TABLE 1-PORT EVERGLADES-North Terminal-Tank and Loading Rack Information

<u>Tank No.</u>	<u>Tank Type</u>	<u>Capacity</u>	<u>Product</u>	<u>Tank Dim. (ft)</u>
201	Cone	81,120	Bunker "C"	117' x 42'
202	Cone	80,722	Bunker "C"	117' x 42'
203	Float	29,392	Crude	72' x 40'
204	Cone	15,084	Diesel	50' x 40'
205	Int. Pan	92,468	Crude	120' x 48'
207	Float	55,000	Jet A	100' x 40'
208	Cone	80,315	AC-20	120' x 40'
209	Cone	55,953	AC-20	100' x 40'
210	Cone	20,069	Beloil	60' x 40'
211	Int. Pan	54,247	JP-4	90' x 48'
212	Int. Pan	51,361	Gasoline	90' x 48'
213	Float	53,866	Gasoline	90' x 40'
214	Float	53,898	Gasoline	90' x 40'
215	Float	80,485	JP-4	110' x 48'
216	Float	80,501	JP-4	110' x 48'
217	Float	80,509	JP-4	110' x 48'
218	Float	80,552	Jet A	110' x 48'
219	Float	80,510	JP-4	110' x 48'
220	Int. Pan	41,879	Gasoline	72' x 44'
223	Float	119,649	Crude	134' x 48'
224	Float	119,800	Crude	134' x 48'
225	Cone	5,130	AC-20	35' x 30'
226	Cone	20,000	RC-70	56' x 48'
PM-1	Cone	95,833	Diesel	144' x 34'
PM-2	Cone	96,024	Bunker "C"	144' x 34'
PM-3	Cone	96,501	Bunker "C"	144' x 34'
PM-4	Cone	95,000	Jet A	144' x 34'
PM-5	Cone	95,874	.75 Bunker	144' x 34'
PM-6	Cone	96,133	Bunker "C"	144' x 34'
PM-7	Cone	96,403	Diesel	144' x 34'
PM-8	Cone	96,003	Diesel	144' x 34'
PM-10	Cone	96,427	Jet A	144' x 34'
PM-11	Cone	96,017	Diesel	144' x 34'
		<u>2,392,725</u>	Bbls.	

LOADING RACKS

<u>Load Rack Number</u>	<u>Product</u>		
	(#2)	(#6)	(#5)
Load Rack #1	Diesel	Bunker "C"	Beloil
Load Rack #2	RC-70		
Load Rack #3	JP-4 Fuel		
Load Rack #4	Jet A Fuel		
Load Rack #5	Gasoline		
Load Rack #6	Asphalt		
Load Rack #7 (inflow)	Crude Oil		

Note: Tank contents represent products stored at facility at present time.

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

A. Raw Materials and Chemicals Used in your Process, if applicable: (refer to Section C)

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): _____

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (See Table 2)

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	
Breathing loss	41.53	181.9	Good Practice	41.53	41.53	181.9	tanks
Working loss	1.50	6.6	in accordance	1.50	1.50	6.6	tanks
Loading loss	1.75	7.7	with FAC Section	1.75	1.75	7.7	loading racks
Heaters (particulate)	N/A*		17.2 0.1 lbs/million BTU				

*N/A - heaters assumed not applicable since less than 250 million BTU/hr.
 D. Control Devices: (See Section V, Item 4) N/A (17-2.05(6))

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

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g., Section 17-2.05(8) Table II, E. (1), F.A.C. - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard

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

⁵If Applicable

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
diesel fuel #2 (3)	0.833 $\frac{\text{bbls}}{\text{hr}}$	1.24 $\frac{\text{bbls}}{\text{hr}}$	5.0
bunker "C" #6 (2)	0.881 $\frac{\text{bbls}}{\text{hr}}$	1.24 $\frac{\text{bbls}}{\text{hr}}$	6.6

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

Fuel Analysis: * Refer to attachment #2 for fuel analysis.

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

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

G. Indicate liquid or solid wastes generated and method of disposal. (Neff Oil Company)
Liquid wastes generated during normal operations and cleaning (also possible spills), are removed from terminal by an industrial waste disposal contactor. No solid wastes are generated. Any solids possibly accumulated during cleaning are resuspended and removed with the liquid wastes.

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

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

Gas Flow Rate: _____ ACFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

* Not applicable to storage tanks. See attachment #2 for heater details.

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. _____

ATTACHMENT NO. 2

AIR POLLUTION SOURCE PERMIT APPLICATION

Section III: Air Pollution Sources and Control Devices

E. Fuels

Fuel Analysis:

	<u>diesel (#2)</u>	<u>bunker (#6)</u>
% sulfur:	(mass) 0.35	(wt) 2.5
density 16/gal @ 60°F	7.5	7.9
heat capacity: Btu/lb -	21,500	21,430
Btu/gal -	160,000	167,150
% ash	(mass) 0.02	(wt) 0.06
% nitrogen		

H. Emission Stack and Flow Geometry for heaters

	<u>STACK</u>	
	<u>(a) No. 2</u>	<u>(b) No. 6</u>
Stack Height (ft)	20	20
Gas Flow Rate (ACFM)	170	590
Water Vapor Content (%)	6.7	6.8
Stack Diameter (ft)	12" O.D.	18" O.D.
Gas Exit Temp. (°F)	1000°	350

	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.

- N/A 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). (See attached calculation sheets)
- N/A 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).
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 Figure 2)
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 Figure 2)
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 Figure 1)

- 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 N/A

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: | 4. Capital Costs: |
| 2. Operating Principles: | 6. Operating Costs: |
| 3. Efficiency: * | 8. Maintenance Cost: |
| 5. Useful Life: | |
| 7. Energy: | |
| 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

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 N/A

A. Company Monitored Data

1. _____ no sites _____ TSP _____ () SO²* _____ 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.

SECTION II

SUMMARY TABLE AND CALCULATIONS OF
EVAPORATIVE LOSSES ASSOCIATED WITH THE SERVICE TERMINAL

TABLE #2: SUMMARY TABLE OF PRODUCTS, FLOWS AND LOSSES

PRODUCT	TANK NO. (type)	CAPACITY (barrel)	THROUGHPUT (bbl/yr)	INPUT (bbl/yr.)			OUTPUT (bbl/yr.)			LOSSES (lb/yr.)			
				Ship	Pipe	Truck	Ship	Pipe	Truck	Breathing	Working	Loading	Total
Bunker C (No. 6 oil)	201 C	81,120	3.913 x 10 ⁶	3,695,963	-----	-----	3,794,299	-----	336,611	7,979	300.4	13.73	8,293
	202 C	80,722											
	PM2 C	96,024											
	PM3 C	96,501											
	PM5 C	95,874											
	PM6 C	96,133											
		546,374											
Diesel (No. 2 oil)	204 C	15,084	1.562 x 10 ⁶	1,603,810	-----	20,903	079,931	-----	619,068	40,738	2,456	562	43,756
	PH1 C	95,833											
	PH7 C	96,403											
	PM0 C	96,003											
	PH1C	96,017											
		399,340											
Jet Naptha (JP-4)	211 IP	54,247	1.066 x 10 ⁶	875,626	-----	-----	-----	1,163,780	92,500	80,755	1,204	8,183	90,162
	215 F	80,485											
	216 F	80,501											
	217 F	80,509											
	219 F	80,510											
		376,252											
Crude Oil	203 F	29,392	4.680 x 10 ⁶	-----	4,685,741	-----	4,673,709	-----	-----	70,482	5,131	-----	75,613
	205 IP	92,460											
	223 F	119,649											
	224 F	119,800											
		331,917											
Gasoline	212 IP	51,361	1.5 x 10 ⁶	1,546,092	-----	-----	-----	1,497,489	21,336	142,533	1,847	6,459	150,839
	213 F	53,866											
	214 F	53,898											
	220 IP	41,079											
		201,004											
Jet Kerosene (Jet A)	207 F	55,000	1.424 x 10 ⁶	1,663,795	-----	-----	-----	1,073,771	109,602	24,335	2,372	124.2	26,831
	210 F	80,552											
	PM4 C	95,000											
	PM10C	96,427											
		326,979											
Beloil (No. 5 oil)	210 C	20,069	7.3 x 10 ⁴	-----	58,827	-----	-----	-----	87,256	126.8	12.6	1.0	140
		2,231,327	14,217,204	9,385,286	4,744,568	20,903	9,347,939	2,237,551	2,751,504	366,969	13,323	15,343	395,634

.C - cone roof tank (fixed)
F - floating roof tank
IP - Internal floating pan

LOSSES BY PRODUCT - SUMMARY

(1) Bunker C (#6) (Fixed: 201,202,PM2,PM3,PM5,PM6)

(a) Breathing:
 $L_{B_{total}} = 21.86 \text{ lb/day} = 7,979 \text{ lb/yr.}$

(b) Working:
 $L_{W_{total}} = 0.82 \text{ lb/day} = 300.4 \text{ lb/yr.}$

(c) Loading
 $L_{L_{total}} = 13.73 \text{ lb/yr.}$

(2) Diesel #2 (Fixed: 204,PM1,PM7,Pm8,PM11)

(a) Breathing:
 $L_{B_{total}} = 111.6 \text{ lb/day} = 40,738 \text{ lb/yr.}$

(b) Working:
 $L_{W_{total}} = 6.73 \text{ lb/day} = 2,456 \text{ lb/yr.}$

(c) Loading:
 $L_{L_{total}} = 1.54 \text{ lb/day} = 562 \text{ lb/yr.}$

(3) JP-4 (Floating: 211,215,216,217,219)

(a) Breathing:
 $L_{S_{total}} = 221.3 \text{ lb/day} = 80,775 \text{ lb/yr.}$

(b) Working:
 $L_{WD_{total}} = 3.3 \text{ lb/day} = 1,204 \text{ lb/yr.}$

(c) Loading:
 $L_{L_{total}} = 22.4 \text{ lb/day} = 8,183 \text{ lb/yr.}$

(4) Crude (Float: 203,205,223,224)

(a) Breathing: $L_{S_{total}} = 193.1 \text{ lb/day} = 70,482 \text{ lb/yr.}$

(b) Working: $L_{W_{D_{total}}} = 14.1 \text{ lb/day} = 5,130.8 \text{ lb/yr.}$

(c) Loading: $L_{L_{total}} = 0$ No Loading Losses

(5) Gasoline (Float: 212,213,214,220)

(a) Breathing: $L_{S_{total}} = 390.5 \text{ lb/day} = 142,533 \text{ lb/yr.}$

(b) Working: $L_{W_{D_{total}}} = 5.1 \text{ lb/day} = 1,847 \text{ lb/yr.}$

(c) Loading: $L_{L_{total}} = 17.70 \text{ lb/day} = 6,459 \text{ lb/yr.}$

(6) Jet A: (Fixed: PM4,PM10 Float: 207, 218)

(a) Breathing: $L_{B_{total}} = 66.9 \text{ lb/day} = 24,415 \text{ lb/yr.}$

(b) Working: $L_{W_{total}} = 6.5 \text{ lb/day} = 2,373 \text{ lb/yr.}$

(c) Loading: $L_{L_{total}} = 0.34 \text{ lb/day} = 124.2 \text{ lb/yr.}$

(7) Beloil:

(Fixed: 210)

(a) Breathing: $L_{B_{total}} = 0.347 \text{ lb/day} = 126.8 \text{ lb/yr.}$

(b) Working: $L_{W_{total}} = .035 \text{ lb/day} = 12.6 \text{ lb/yr.}$

(c) Loading: $L_{L_{total}} = 0.9 \text{ lb/yr.}$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil : Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET _____ OF _____

Breathing and Standing Losses

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Eurghds. JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 1 OF 16

A) Breathing and Standing Losses:

Fixed: $L_B = 2.21 \times 10^{-4} M \left[\frac{P}{14.7-P} \right]^{.68} D^{1.73} H^{.51} \Delta T^{.5} F_p C K_c$

Floating: $L_s = 9.21 \times 10^{-3} M \left[\frac{P}{14.7-P} \right]^{.7} D^{1.5} V_w^{.7} K_t K_s K_p K_c$

Tank #

(201) Fixed roof (cone)
 Bunker C - #6
 Cap = 81,120 bbl
 diam = 117'
 ht = 42

$F_p = 1.3$
 $C = 1.0$
 $K_c = 1.0$
 $\Delta T = 15.7^\circ F$
 $T = 125^\circ F$

$M = 190$
 $* P = .0004$

$H = (42/2) + (.1)(58.5)(1/3) = 23 \text{ ft.}$

$L_B = (2.21 \times 10^{-4})(190) \left[\frac{.0004}{14.7-.0004} \right]^{.68} (117)^{1.73} (23)^{.51} (15.7)^{.5} (1.3)(1.0)(1.0)$

$L_B = 3.19 \text{ lb/day} = 1163 \text{ lb/yr.}$

* Vapor pressure value obtained for bunker oil #6 at $T = 125^\circ F$ by extrapolation of table 4.3-1 of AP-42.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglade JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 2 OF 16

(202) Fixed Bunker C (#6) * same as tank 201

$$L_B = 3.19 \text{ lb/day} = 1163 \text{ lb/yr.}$$

(203) Floating Roof Crude RVP 5 $K_p = 1.0$ $V_w = 10 \text{ mph}$
 $M = 50$ $K_s = 1.0$
 $P = 4.0$ $K_t = .045$
 $D = 72'$ $K_c = .84$
 $h_A = 40'$ $T = 80.5^\circ\text{F}$

$$L_s = (9.21 \times 10^{-3}) (50) \left[\frac{4.0}{10.7} \right]^{.7} (72)^{1.5} (10)^{.7} (.045) (1.0) (1.0) (.84)$$

$$L_s = 26.8 \text{ lb/day} = 9,782 \text{ lb/yr.}$$

(204) Fixed Diesel #2 $F_p = 1.3$
 $M = 130$ $C = 1.0$
 $P = .012$ $K_c = 1.0$
 $D = 50'$ $\Delta T = 15.7$
 $h_A = 40'$ $T = 82.2^\circ\text{F}$

$$H = 20' + (.1)(25)(1/3) = 20.83 \text{ ft}$$

$$L_B = (2.21 \times 10^{-4}) (130) \left[\frac{.012}{14.7 - .012} \right]^{.68} (50)^{1.73} (20.83)^{.51} (15.7)^{.5} (1.3) (1) (1)$$

$$L_B = 4.81 \text{ lb/day} = 1,755 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 3 OF 16

(205) Float - Int Pan $K_p = 1.0$
 Crude $K_s = 1.0$
 $M = 50$ $K_t = .045$
 $P = 4.0$ $K_c = .84$
 $D = 120$ $T = 80.5$
 $ht = 48$ $V_w = 10 \text{ mph use } 4 \text{ mph}$

$$L_s = (9.21 \times 10^{-3})(50) \left[\frac{4.0}{10.7} \right]^{.7} (120)^{1.5} (4)^{.7} (.045)(1.0)(1.0)(.84)$$

$$L_s = 30.3 \text{ lb/day} = 11,070 \text{ lb/yr.}$$

(206) Horiz. tank $F_p = 1.3$
 Lube oil $\Delta T = 15.7$
 $M =$ $T =$
 $P =$
 $D =$
 $ht =$

Note: Emissions not calculated for lube oil or asphalt products due to low vapor pressure and volume of product stored.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 4 OF 16

(207) Float $K_p = 1.0$
 Jet A $K_s = 1.0$
 $M = 130$ $K_t = .045$
 $T = 80.^\circ F$ $K_c = 1.0$
 $P = .015$ psia $V_w = 10$ mph
 $h_t = 40'$
 $D = 100'$

$$L_s = (9.21 \times 10^{-3})(130) \left(\frac{.015}{14.7 - .015} \right)^{.7} (100)^{1.5} (10)^{.7} (.045)(1)(1)(1)$$

$$L_s = 2.18 \text{ lb/day}$$

(208) Fixed - insulated $F_p = 1.2$ (aluminum siding)
 AC-20 (asphalt cement) $D = 120$
 $M =$ $h_t = 40$
 $P =$ $\Delta T = 15.7$
 $T =$

$$H = 20 + (.1)(60)(1/3) = 22'$$

$$L_B = 2.21 \times 10^{-4} (M) \left[\frac{P}{14.7 - P} \right]^{.68} (120)^{1.73} (22)^{.51} (15.7)^{.5} (1.2)(1)(1)$$

See note for tank #206.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 5 OF 16

(209) Fixed-insulated
 AC-20 (asphalt cement) $F_p = 1.2$ (aluminum siding)
 $M =$ $D = 100'$
 $T =$ $h_A = 40'$
 $P =$ $\Delta T = 15.7$

$$H = 20 + (.1)(50)(1/3) = 21.7 \text{ ft.}$$

$$L_B = (2.21 \times 10^{-4})(M) \left[\frac{P}{14.7 - P} \right]^{.68} (100)^{1.73} (22)^{.51} (15.7)^{.5} (1.2)(1)(1)$$

See note for tank # 206

(210) Fixed $F_p = 1.3$
 Belloil (used #6 oil prop) $D = 60$
 $M = 190$ $h_A = 40$
 $P = .00009$ $\Delta T = 15.7^\circ \text{F}$
 $T = 77.8^\circ \text{F}$

$$H = 20 + (.1)(30)(1/3) = 21.0'$$

$$L_B = (2.21 \times 10^{-4})(190) \left[\frac{.00009}{14.7 - .00009} \right]^{.68} (60)^{1.73} (21)^{.51} (15.7)^{.5} (1.3)(1)(1)$$

$$L_B = 0.347 \text{ lb/day} = 126.8 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 6 OF 16

(211) Float - Int Pan D = 90'
 JP-4 ht = 48'
 M = 80 K_p = 1.0
 P = 1.9 psia K_s = 1.0
 T = 80 °F K_t = .045
 V_w = 10 mph / use 4 mph K_c = 1.0
 ΔT = 15.7

$$L_s = (9.21 \times 10^{-3})(80) \left[\frac{1.9}{14.7 - 1.9} \right]^{.7} (90)^{1.5} (4)^{.7} (.045)(1)(1)(1)$$

$$L_s = 19.7 \text{ lb/day} = 7,188 \text{ lb/yr.}$$

(212) Float - Int Pan D = 90
 Gasoline - Hertz ht = 48
 M = 62 K_p = 1.0
 T = 79.9 °F K_s = 1.0
 RVP = 11.2 K_t = .045
 P = 8.4 psia K_c = 1.0
 V_w = 10 mph / use 4 mph
 ΔT = 15.7 °F

$$L_s = (9.21 \times 10^{-3})(62) \left[\frac{8.4}{14.7 - 8.4} \right]^{.7} (90)^{1.5} (4)^{.7} (.045)(1)(1)(1)$$

$$L_s = 70.8 \text{ lb/day} = 25,850 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 7 OF 16

(213) Float Gasoline - Shell same as 212 but $V_w = 10$

$$L_s = 134.5 \text{ lb/day} = 49,088 \text{ lb/yr.}$$

(214) Float Gasoline - Shell * same as # 213

$$L_s = 134.5 \text{ lb/day} = 49,088 \text{ lb/yr.}$$

(215) Floating roof

JP-40

M = 80

T = 79.7 °F

P = 1.9 psia

$V_w = 10 \text{ mph}$

D = 110'

NA = 48'

$K_p = 1.0$

$K_s = 1.0$

$K_t = .045$

$K_c = 1.0$

$$L_s = (9.21 \times 10^{-3})(80) \left[\frac{1.9}{14.7 - 1.9} \right]^{.7} (110)^{.5} (10)^{.7} (.045)(1)(1)(1)$$

$$L_s = 50.4 \text{ lb/day} = 18,409 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 8 OF 16

(216) Float same as tank # 215
 JP-4
 M = 80 D = 110'
 P = 1.9 V_w = 10 mph
 T = 78.5 °F

$$L_s = 50.4 \text{ lb/day} = 18,409 \text{ lb/yr.}$$

(217) Float same as tank # 215
 JP-4
 M = 80 D = 110'
 P = 1.9 V_w = 10 mph
 T = 78.8 °F

$$L_s = 50.4 \text{ lb/day} = 18,409 \text{ lb/yr.}$$

(218) Float - Foam D = 110
 Jet A - Jet Ker. h_A = 48
 M = 130 K_p = 1.0
 P = 0.015 K_s = 1.0
 T = 80 °F K_t = .045
 V_w = 10 mph K_c = 1.0

$$L_s = (9.21 \times 10^{-3}) (130) \left[\frac{.015}{147 - .015} \right]^{.7} (110)^{1.5} (10)^{.7} (.045) (1) (1) (1)$$

$$L_s = 2.51 \text{ lb/day} = 917 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 9 OF 16

(219) Float D = 110
 JP-4
 M = 80 same as tank # 215
 T = 78.6
 P = 1.9
 V_w = 10 mph

$$L_s = 50.4 \text{ lb/day} = 18,409 \text{ lb/yr.}$$

(220) Float - Int Pan D = 72'
 Gasoline - Shell, RVP 11.2 ht = 44
 M = 62 K_p = 1.0
 T = 80°F K_s = 1.0
 P = 8.4 K_t = .045
 V_w = 10 mph / use 4 mph K_c = 1.0

$$L_s = (9.21 \times 10^{-3})(62) \left[\frac{8.4}{14.7 - 8.4} \right]^{.7} (72)^{1.5} (4)^{.7} (.045)(1)(1)(1)$$

$$L_s = 50.7 \text{ lb/day} = 18,489 \text{ lb/yr.}$$

(221) Horiz tank See note for tank 206
 Lube Oil
 D = 10' ht = 17'
 cap = 238 bbls

(222) Horiz tank — same as # 221

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Ft. Lauderdale JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 10 OF 16

(223) Float
 Crude
 M = 50
 T = 80.5
 P = 4.0
 V_w = 10 mph

D = 134'
 ht = 48'
 K_p = 1.0
 K_s = 1.0
 K_t = .045
 K_c = .84

$$L_s = (9.21 \times 10^{-3}) (50) \left[\frac{140}{14.7 - 4.0} \right]^{.7} (134)^{1.5} (10)^{.7} (.045)(1)(1)(.84)$$

$L_s = 680 \text{ lb/day} = 24,804 \text{ lb/yr.}$

(224) Float
 Crude
 M = 50
 T = 80.5
 P = 4.0

same as tank #223

$L_s = 680 \text{ lb/day} = 24,804 \text{ lb/yr.}$

(225) Fixed - insulated
 AC-20 (asphalt cement)
 M =
 P =
 T = 320 °F

D = 35
 ht = 30'
 ΔT = 15.7 °F
 F_p = 1.2 (aluminum siding)

See note for tank 206.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil : Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 11 OF 16

(226) Fixed $D = 10'$
Asphalt Add $ht = 30'$
 $\Delta T = 20.7$
 $Fp = 1.3$

See note for tank 206.

(227) RC-70 (road tack) $D = 56'$
 $T = 84.7^\circ F$ $ht = 48'$
 $\Delta T = 20.7$

See note for tank 206.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 12 OF 16

(PM 1) Fixed
 Diesel #2
 M = 130
 T = 82.2
 P = .012
 ΔT = 15.7
 D = 144'
 ht = 34'
 Fp = 1.2
 C = 1.0
 Ke = 1.0

$$H = 17 + (.1)(72)(1/3) = 19.4$$

$$L_B = (2.21 \times 10^{-4})(130) \left[\frac{.012}{14.7 - .012} \right]^{.68} (144)^{1.73} (19.4)^{.51} (15.7)^{.5} (1.2)(1)(1)$$

$$L_B = 26.7 \text{ lb/day} = 9,746 \text{ lb/yr.}$$

(PM-2) Fixed
 Bunker C (#6)
 M = 190
 T = 123°F
 P = .0004
 ΔT = 15.7
 D = 144
 ht = 34
 Fp = 1.2
 C = 1.0

$$H = 17 + (.1)(72)(1/3) = 19.4'$$

$$L_B = (2.21 \times 10^{-4})(190) \left[\frac{.0004}{14.7 - .0004} \right]^{.68} (144)^{1.73} (19.4)^{.51} (15.7)^{.5} (1.2)(1)(1)$$

$$L_B = 3.87 \text{ lb/day} = 1,410 \text{ lb/yr.}$$

same as PM 3, PM 5, PM 6

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 13 OF 16

(PM-3) Fixed D = 144
 Bunker C (#6) ht = 34
 M = 190
 T = 123
 P = .0004

same as tank # PM-2, PM5, PM6
 $L_B = 3.87 \text{ lb/day} = 7,410 \text{ lb/yr.}$

(PM-4) Fixed D = 144
 Jet A- Jet Ker. ht = 34
 M = 130 Fp = 1.2
 T = 80°F C = 1.0
 P = .015 Kc = 1.0
 $\Delta T = 15.7$

$H = 19.4$

$$L_B = (2.21 \times 10^{-4})(130) \left[\frac{.015}{14.7 - .015} \right]^{.68} (144)^{.73} (19.4)^{.51} (15.7)^{.5} (1.2)(1)(1)$$

$L_B = 31.1 \text{ lb/day} = 11,348 \text{ lb/yr.}$

(same as PM 10)

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/7/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 14 OF 16

(PM5) Fixed
 Bunker C (#6)
 M = 190
 T = 123°F
 P = .0004
 ΔT = 15.7

D = 144'
 ht = 34'
 Fp = 1.2
 C = 1.0
 Kc = 1.0

H = 19.4'

same as PM 2, PM 3, PM 6

$$L_B = (2.21 \times 10^{-4})(190) \left[\frac{.0004}{14.7 - .0004} \right]^{.68} (144)^{1.73} (19.4)^{.51} (15.7)^{.5} (1.2)(1)(1)$$

$$L_B = 3.87 \text{ lb/day} = 1,410 \text{ lb/yr.}$$

(PM 6) Fixed
 Bunker "C"
 M = 190
 T = 123°F

D = 144
 ht = 34

same as PM 2, PM 3, PM 5

$$L_B = 3.87 \text{ lb/day} = 1,410 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Eurglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 15 OF 16

(PM 7) Fixed Diesel #2
 M = 130
 T = 82.2°F
 P = .012
 ΔT = 15.7
 H = 19.4'

D = 144
 ht = 34
 Fp = 1.2
 C = 1.0
 Kc = 1.0

$$L_B = (2.21 \times 10^{-4}) (130) \left[\frac{.012}{14.7 - .012} \right]^{.68} (144)^{1.73} (19.4)^{.51} (15.7)^{.5} (1.2)(1)$$

$$L_B = 26.7 \text{ lb/day} = 9,746 \text{ lb/yr.}$$

(PM 8) Fixed Diesel #2
 same as PM 7

$$L_B = 26.7 \text{ lb/day} = 9,746 \text{ lb/yr.}$$

(PM 10) Fixed Jet A
 M = 130
 T = 80°F
 P = .015
 ΔT = 15.7
 H = 19.4

D = 144
 ht = 34
 Fp = 1.2
 C = 1.0
 Kc = 1.0

(same as PM 4)

$$L_B = (2.21 \times 10^{-4}) (130) \left[\frac{.015}{14.7 - .015} \right]^{.68} (144)^{1.73} (19.4)^{.51} (15.7)^{.5} (1.2)(1)$$

$$L_B = 31.1 \text{ lb/day} = 11,348 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 16 OF 16

(PM 11) Fixed $D = 144$
Diesel #2 $W = 34$
 $M = 130$

same as PM 7, PM 8

$$L_B = 26.7 \text{ lb/day} = 9,746 \text{ lb/yr.}$$

Note:

- 1) Ambient air temperature variation, ΔT , was obtained from the United States Department of Commerce, National Climatic Center.
- 2) Product characteristics, formula variables and factors obtained from manufacturer and U.S. Environmental Protection Agency Publication No. AP-42.
- 3) Average wind velocity obtained from National Climatic Center.
- 4) Product temperature obtained from operator.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC
MIAMI, FLORIDA

JOB Belcher Oil : Pt. Eurghd. JOB NO. _____ COMPUTED BY JM DATE 4/8/8
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET _____ OF _____

Working and Withdrawal Losses

EDWARD E. CLARK ENGINEERS - SCIENTISTS, IN
 MIAMI, FLORIDA

JOB Belcher Oil: Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/81
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 1 OF 12

(B) Working and Withdrawal Losses (by product)

Fixed: $L_w = 2.40 \times 10^{-2} MPK_N K_c$ $16/10^3 g$

Floating: $L_{wD} = \frac{22.4 d C_F}{D}$ $16/10^3 g$

(1) Bunker "C" : (Fixed roof tanks)

201
202
PM 2
PM 3
PM 5
PM 6

In: 3,695,963 }
 Out: 4,130,910 } \therefore assume $Q_{thru} = 3.913 \times 10^6$

<u>(a) Tank</u>	<u>diam (ft)</u>	<u>cap (gal)</u>
201	117	81,120
202	117	80,722
		$161,842 / 546,374 = .296$

$Q(a) = 1.16 \times 10^6 \frac{bb/s}{yr}$

$L_w = 2.40 \times 10^{-2} MPK_N K_c$

$L_w = (2.40 \times 10^{-2})(190)(.0004)(1)(1) = .00182 \frac{16}{10^3} g$

$L_w = (.00182 \frac{16}{10^3} gal) (1.16 \times 10^6 \frac{bb/s}{yr}) (42 \frac{gal}{bb})$

$L_w = 88.8 \frac{16}{yr}$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 2 OF 12

(b) Tank	diam	cap
PM2	144	96,024
PM3	"	96,501
PM5	"	96,874
PM6	"	96,133

$$385,532 / 546,374 = .7056$$

$$Q(b) = 2.761 \times 10^6 \text{ bbls/yr.}$$

$$L_w = (.00182 \text{ lb}/10^3 \text{ gal}) (2.761 \times 10^6 \frac{\text{bbls}}{\text{yr.}}) (42 \text{ gal/bbl})$$

$$L_w = 211.6 \text{ lb/yr}$$

$$L_w = \frac{300.4 \text{ lb/yr.}}{\text{total (4 tanks)}} = .82 \text{ lb/day}$$

$$300.4 / 4 = 75.1$$

$$75.1 / 2000 = T/\text{yr.}$$

$$75.1 / 8760 = \#/\text{hr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Eurglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 3 OF 12

(2) Diesel #2: (Fixed roof tanks)

204
 PM 1
 PM 7
 PM 8
 PM 11

In: 1,624,713 bbls }
 Out: 1,498,999 bbls }

$$Q_{\text{thrupt}} = 1,561,856 \text{ bbls/yr.}$$

(a)

<u>Tank</u>	<u>diam</u>	<u>cap</u>	
204	50	15,084 / 399,340	= .03778

$$Q(a) = 58,994.9 \text{ bbls/yr.}$$

$$L_w = (2.40 \times 10^{-2})(130)(.012)(1)(1) = .03744 \text{ lb}/10^3 \text{ gal}$$

$$L_w = (.03744 \text{ lb}/10^3 \text{ gal})(58,994.9 \frac{\text{bbls}}{\text{yr}})(42 \frac{\text{gal}}{\text{bbl}})$$

$$L_w = 92.8 \text{ lb/yr.}$$

(b)

<u>Tanks</u>	<u>diam</u>	<u>cap</u>	
PM 17, 8, 11	144	387,256 / 399,340	= .9622

$$Q(b) = 1,502,861 \text{ bbl/yr.}$$

$$L_w = (.03744 \text{ lb}/10^3 \text{ gal})(1,502,861 \frac{\text{bbl}}{\text{yr}})(42 \frac{\text{gal}}{\text{bbl}})$$

$$L_w = 2,363 \text{ lb/yr.}$$

$$L_w_{\text{total}} = 2,456 \frac{\text{lb}}{\text{yr}} = 6.73 \text{ lb/day}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 4 OF 12

(3) JP-4 (USAF) (Floating roof tanks)

215
216
217
219

In : 875,626 bbls/yr
 Out : 1,256,368 bbls/yr.

$\therefore Q_{\text{thpt}} = 1,065,997 \text{ bbls/yr.}$

(a)	<u>Tanks</u>	<u>diam</u>	<u>cap</u>	
	211	90	54,247	$\frac{54,247}{376,252} = 0.14417$

$Q(a) = 153,692.6 \text{ bbls/yr.}$

$L_{\text{wd}} = \frac{(22.4)(d)(C_F)}{D} = \frac{(22.4)(6.4)(.02)}{90} = .03186 \frac{\text{lb}}{10^3 \text{ gal}}$

$L_{\text{wd}} = (.03186 \frac{\text{lb}}{10^3 \text{ gal}}) (153,692.6 \frac{\text{bbls}}{\text{yr}}) (42 \frac{\text{gal}}{\text{bbl}})$

$L_{\text{wd}} = 205.6 \text{ lb/yr.}$

(b)	<u>Tank</u>	<u>diam</u>	<u>cap</u>	
	215	110	80,485	
	216	"	80,501	
	217	"	80,509	
	219	"	80,510	
			<u>320,005</u>	$\frac{320,005}{376,252} = .8558$

$Q(b) = 912,304.4 \text{ bbls/yr.}$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil : Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 5 OF 12

$$L_{wd} = \frac{(22.4)(6.4)(.02)}{110} = .026065 \frac{lb}{10^3 gal}$$

$$L_{WD} = (.02606 \frac{lb}{10^3 gal}) (912,304.4 \frac{bbls}{yr.}) (42 \frac{gal}{bbl})$$

$$L_{WD} = 998.7 \text{ lb/yr.}$$

$$\underline{L_{WD \text{ total}} = 1,204.3 \text{ lb/yr.} = 3.3 \text{ lb/day}}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 6 OF 12

(4) Crude (Floating roof tanks) 203
205
223
224

In: 4,685,741

Out: 4,673,709

$$\therefore Q_{\text{thpt}} = 4,679,725 \text{ bbl/yr.}$$

(a)	<u>Tank</u>	<u>diam</u>	<u>cap</u>	
	205	120	92,468	$\frac{92,468}{361,309} = .2559$

$$Q(a) = 1,197,541.6 \text{ bbl/yr.}$$

$$L_{\text{wd}} = \frac{(22.4)(7.1)(.02)}{120} = .0265 \text{ } \frac{16}{10^3} \text{ gal}$$

$$L_{\text{WD}} = (.0265 \text{ } \frac{16}{10^3} \text{ gal}) (1,197,542 \frac{\text{bbl}}{\text{yr}}) (42 \frac{\text{gal}}{\text{bbl}})$$

$$L_{\text{WD}} = 1,333.4 \text{ } \frac{16}{\text{yr.}}$$

(b)	<u>Tank</u>	<u>diam</u>	<u>cap</u>	
	223	134	119,649	
	224	134	119,800	
			239,449	$\frac{239,449}{361,309} = 0.663$

$$Q(b) = 3,101,377 \text{ bbl/yr}$$

$$L_{\text{wd}} = \frac{(22.4)(7.1)(.02)}{134} = .02373 \text{ } \frac{16}{10^3} \text{ gal}$$

$$L_{\text{WD}} = (.02373 \frac{16}{10^3} \text{ gal}) (3,101,377 \frac{\text{bbl}}{\text{yr}}) (42 \frac{\text{gal}}{\text{bbl}}) = 3,091.0 \frac{16}{\text{yr}}$$

$$L_{\text{WD}} = 3,091.0 \text{ } \frac{16}{\text{yr.}}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/81
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 7 OF 12

(c) Tank diam cap.

$$203 \quad 72 \quad 29,392/361,309 = .081$$

$$Q(c) = 380,689.3 \text{ bbl/yr.}$$

$$L_{wd} = \frac{(22.4)(7.1)(.02)}{72} = .04417 \text{ lb}/_{10^3} \text{ gal}$$

$$L_{wo} = \left(.04417 \frac{\text{lb}}{10^3 \text{ gal}} \right) \left(380,689.3 \frac{\text{bbl}}{\text{yr.}} \right) \left(42 \frac{\text{gal}}{\text{bbl}} \right)$$

$$L_{wd} = 706.4 \text{ lb/yr.}$$

$$L_{wd \text{ Total}} = 5130.8 \text{ lb/yr} = 14.1 \text{ lb/day}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Ft. Lauderdale JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 8 OF 12

(5) Gasoline - (Floating roof tanks)

212
213
214
220

In: 1,614,136 bbls/yr.
 Out: 21,336 bbls/yr.

$Q_{\text{thrust}} = 1.5 \times 10^6 \text{ bbls/yr.}$

(a) Tank	diam	cap
212	90	51,361
213	90	53,866
214	90	53,898

$159,125 / 201,004 = .7917$

$Q(a) = 1,187,476 \text{ bbls/yr.}$

$L_{wd} = \frac{(22.4)(5.6)(.02)}{90} = .02788 \text{ } 16/10^3 \text{ gal}$

$L_{wb} = (.02788 \text{ } 16/10^3 \text{ gal})(1,187,476 \text{ } \frac{\text{bbls}}{\text{yr.}})(\frac{42 \text{ gal}}{\text{bbl}})$

$L_{wd} = 1,390 \text{ } 16/\text{yr}$

(b) Tank	diam	cap
220	72	41,879 / 201,004 = .2083

$Q(b) = 312,523.6 \text{ bbls/yr.}$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC
 MIAMI, FLORIDA

JOB Belcher Oil Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/8
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 9 OF 12

$$L_{wd} = \frac{(22.4)(5.6)(.02)}{72} = .03844 \frac{lb}{10^3 gal}$$

$$L_{wd} = (.03844 \frac{lb}{10^3 gal}) (312523.6 \frac{bbl}{yr}) (42 \frac{gal}{bbl})$$

$$L_{wd} = 457.4 \text{ lb/yr.}$$

$$\underline{L_{wd \text{ total}} = 1,847 \text{ lb/yr.} = 5.1 \text{ lb/day}}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Ft. Lauderdale JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 10 OF 12

(6) Jet A (Cone and Float roof) 207
218
PM4
PM10

In: 1,334,037 bbls/yr.

Out: 1,513,130 bbls/yr.

$$\therefore Q_{\text{thpt}} = 1,423,584 \text{ bbls/yr.}$$

(a) Tank diam cap
 F 207 100' 55,000/326,979 = .1682

$$Q(a) = 239,447 \text{ bbls/yr.}$$

$$L_{\text{WD}} = \frac{22.4(7.0)(.02)}{100} = .03136 \text{ } \frac{\text{lb}}{10^3 \text{ gal}}$$

$$L_{\text{WD}} = (.03136 \frac{\text{lb}}{10^3 \text{ gal}})(239,447 \text{ bbls/yr.})(42 \frac{\text{gal}}{\text{bbl}})$$

$$L_{\text{WD}} = 315 \text{ lb/yr.}$$

(b) Tank diam cap
 F 218 110 80552/326,979 = .2464

$$Q(b) = 350,771.1 \text{ bbls/yr.}$$

$$L_{\text{WD}} = \frac{(22.4)(7.0)(.02)}{110} = .0285 \text{ } \frac{\text{lb}}{10^3 \text{ gal}}$$

$$L_{\text{WD}} = (.0285 \frac{\text{lb}}{10^3 \text{ gal}})(350,771.1 \frac{\text{bbls}}{\text{yr.}})(42 \frac{\text{gal}}{\text{bbl}})$$

$$L_{\text{WD}} = 419.9 \text{ lb/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
 MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
 DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
 SHEET 11 OF 12

(c)	Tank	diam	cap
c	PM 4	144	95000
c	PM 10	144	96,427
			$\frac{191,427}{326,979} = .585$

$$Q(c) = 830,796.6 \text{ bbls/yr.}$$

$$L_w = (2.40 \times 10^{-2})(130)(.015)(1)(1) = .0468 \text{ } \frac{\text{lb}}{10^3 \text{ gal}}$$

$$L_w = (.0468 \text{ } \frac{\text{lb}}{10^3 \text{ gal}})(830,796.6 \text{ } \frac{\text{bbls}}{\text{yr.}})(42 \text{ } \frac{\text{gal}}{\text{bbl}})$$

$$L_w = 1,636.9 \text{ lb/yr.} = 4.47 \text{ lb/day}$$

$$\underline{L_{w \text{ total}} = 2,371.8 \text{ lb/yr.} = 6.5 \text{ lb/day}}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC
MIAMI, FLORIDA

JOB Belcher Oil: Ft. Lauderdale JOB NO. 8015 COMPUTED BY JM DATE 4/8/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 12 OF 12

(7) Beloil : (Fixed Roof tank) 210

In: 58,827 bbls/yr.

Out: 87,256 bbls/yr.

$$\therefore Q_{\text{thpt}} = 73,042 \text{ bbls/yr.}$$

$$L_w = 2.40 \times 10^{-2} (190)(.0009)(1)(1) = .004104 \frac{\text{lb}}{10^3 \text{ gal}}$$

$$L_w = (.004104 \frac{\text{lb}}{10^3 \text{ gal}})(73,042 \frac{\text{bbls}}{\text{yr}})(42)$$

$$\underline{L_w = 12.6 \text{ lb/yr.}}$$

Note :

- 1) see note (2) breathing losses.

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil: Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/9/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET _____ OF _____

Loading Losses

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil: Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/9/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 1 OF 4

(C) Loading Losses (by product.)

$$L_L = 12.46 \frac{\text{SPM}}{T} \quad \left(\frac{16}{10^3} \text{ gal loaded} \right)$$

$S = 0.60$ (submerged loading: normal dedicated service)

(1) Bunker C - No. 6

$$L_L = \frac{(12.46)(0.60)(.0004)(190)}{125 + 460} = .000971 \frac{16}{10^3} \text{ gal}$$

$$Q_{\text{Bunker Truck}} = 336,611 \text{ bbls/yr.}$$

$$L_L = (.000971 \frac{16}{10^3} \text{ gal}) (336,611 \frac{\text{bbls}}{\text{yr.}}) \left(42 \frac{\text{gal}}{\text{bbl}} \right)$$

$$L_L = 13.73 \frac{16}{10^3} \text{ gal/yr.}$$

(2) Diesel - #2

$$L_L = \frac{(12.46)(0.60)(.012)(130)}{80 + 460} = 0.0216 \frac{16}{10^3} \text{ gal}$$

$$Q_{\text{Diesel Truck}} = 619,068 \text{ bbls/yr.}$$

$$L_L = (.0216 \frac{16}{10^3} \text{ gal}) (619,068 \frac{\text{bbls}}{\text{yr.}}) \left(42 \frac{\text{gal}}{\text{bbl}} \right)$$

$$L_L = 5621 \frac{16}{10^3} \text{ gal/yr.}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil: Ft Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/9/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 2 OF 4

(3) JFH

$$L_L = \frac{(12.46)(0.60)(1.9)(80)}{540} = 2.10 \text{ } \frac{16}{10^3} \text{ gal}$$

$$Q_{\text{JP-4 Truck}} = 92,588 \text{ } \frac{\text{bb/s}}{\text{yr.}}$$

$$L_L = (2.10 \text{ } \frac{16}{10^3} \text{ gal}) (92,588 \text{ } \frac{\text{bb/s}}{\text{yr.}}) (42)$$

$$L_L = 8,183 \text{ } \frac{16}{\text{yr.}}$$

(4) Crude

$$L_L = \frac{(12.46)(0.60)(40)(50)}{540} = 2.77 \text{ } \frac{16}{10^3} \text{ gal}$$

$$Q_{\text{crude truck}} = 0$$

$$L_L = L_L \times Q_{\text{crude truck}}$$

* no L_L since all product goes out by pipeline

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil: Pt. Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/9/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 3 OF 4

(5) Gasoline

$$L_L = \frac{(12.46)(0.60)(8.4)(62)}{540} = 7.21 \text{ } \frac{10^3 \text{ gal}}{10^3}$$

$$Q_{\text{Truck Gas}} = 21,336 \text{ bbl/yr.}$$

$$L_L = \left(7.21 \frac{10^3 \text{ gal}}{10^3}\right) \left(21,336 \frac{\text{bbl}}{\text{yr}}\right) \left(42 \frac{\text{gal}}{\text{bbl}}\right)$$

$$L_L = 6,459 \text{ } \frac{10^3 \text{ gal}}{\text{yr}}$$

(6) Jet A

$$L_L = \frac{(12.46)(0.60)(.015)(130)}{540} = .0270 \text{ } \frac{10^3 \text{ gal}}{10^3}$$

$$Q_{\text{Truck Jet A}} = 109,601.5 \text{ bbl/yr}$$

* Assume 10%
flow out by
truck

$$L_L = (.0270 \frac{10^3 \text{ gal}}{10^3}) (109,601.5 \frac{\text{bbl}}{\text{yr}}) (42 \frac{\text{gal}}{\text{bbl}})$$

$$L_L = 124.2 \text{ } \frac{10^3 \text{ gal}}{\text{yr}}$$

EDWARD E. CLARK ENGINEERS - SCIENTISTS, INC.
MIAMI, FLORIDA

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 4/9/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET 4 OF 4

(7) Beloil

$$L_L = \frac{(12.46)(.60)(.00009)(190)}{540} = .000237 \text{ } \frac{\text{lb}}{10^3 \text{ gal}}$$

$$Q_{\text{Beloil Truck}} = 87,256 \text{ bbls/yr.}$$

$$L_L = (.000237 \frac{\text{lb}}{10^3 \text{ gal}})(87,256 \text{ bbls/yr})(42 \frac{\text{gal}}{\text{bbl}})$$

$$L_L = 0.90 \text{ lb/yr.}$$

JOB Belcher Oil: Pt Everglades JOB NO. 8015 COMPUTED BY JM DATE 7/9/80
DESCRIPTION Air Pollution Source Permit CHECKED BY LO DATE _____
SHEET _____ OF _____

Loading Loss Emission Concentration

Emission Standard: $L_L \leq 80 \text{ mg/l} ; 4.7 \text{ g/gal}$

$$80 \frac{\text{mg}}{\text{l}} \times \frac{3.78 \text{ l}}{\text{gal}} \times \frac{16}{45\% \times 10^3 \text{ mg}} = 0.666 \frac{16}{10^3} \text{ gal}$$

$$\frac{16}{10^3} \text{ gal} = 120.1 \frac{\text{mg}}{\text{l}}$$

(1) JP4 :

$$L_L = 2.10 \frac{16}{10^3} \text{ gal} = 252 \text{ mg/l}$$

(2) Crude

$$L_L = 2.77 \frac{16}{10^3} \text{ gal} \times \frac{120.1 \text{ mg/l}}{16/10^3 \text{ gal}} = 332.7 \frac{\text{mg}}{\text{l}}$$

* no crude loaded to trucks

(3) Gasoline

$$L_L = 7.21 \frac{16}{10^3} \text{ gal} \times \frac{120.1 \text{ mg/l}}{16/10^3 \text{ gal}} = 865.9 \frac{\text{mg}}{\text{l}}$$

Note: Loading racks for JP4 and Gasoline require vapor control systems in order to meet regulations.

P.E. PERMIT

- | RUSTY (1) COPY OF ALL PERMITS
- ✓ JEN (2) THRU-PUT BEST YEAR BY PRODUCT
BY BARGE, TRUCK, PIPELINE
NET BBL, COPY OF BOILER PERMIT
SHIP BUNKERING
- ✓ RUSTY (3) SOLID & LIQUID WASTE
- ✓ (4) SHELL - LOADING LOSSES 4.7 GR/GAL
- | (5) INFO ON RECOVERY SYSTEM
- (6) JULY 80 PERMITS FOR CONSTRUCTION
ONLY GASOLINE L/R
- (7) L/R DRAINAGE
- ✓ (8) TK CHART

March 12, 1980

Mr. Peter W. Moldenhauer, Engineer
Belcher Oil Company
Post Office Box 1751
Miami, Florida 33101

Re: Permits for Port Everglades
Bulk Gasoline Terminal and
Petroleum Liquid Storage Vessels

Dear Mr. Moldenhauer:

As you requested, our staff has initiated efforts to complete the application for the air pollution operation permit required by the Department of Environmental Regulation (DER). We recently visited the Belcher Oil Port Everglades Terminal and the DER district office in West Palm Beach. We were successful in gathering considerable information regarding the particular requirements for Port Everglades.

The following are the deadlines you should be aware of in satisfying the state regulations:

- 1) Bulk gasoline plants and terminals shall comply with the requirements of the F.A.C. by July 1, 1981, and shall submit an application for a permit to operate or construct by July 1, 1980.
- 2) Petroleum liquid storage terminals which are in compliance but do not have an operating permit shall submit by July 1, 1980, an application for a permit to operate.
- 3) Petroleum liquid storage terminals which are not in compliance and do not have a valid permit to construct and which plan to comply by installing add-on or replacement equipment...., shall submit an application for a permit to construct by October, 1980.

CLARK

Mr. Peter W. Moldenhauer
Belcher Oil
March 12, 1980
Page Two

Also discussed at the DER office was the approach that should be used for a terminal with numerous tanks. After conferring with the DER officials, it was considered most efficient if the emission sources at the terminal were dealt with as a single source (one application form) according to the following categories.

- 1) Storage tanks and any associated losses.
- 2) Heating equipment emissions.
- 3) Loading rack equipment and operations.

This method will simplify the process by greatly reducing the size of the application.

Another item of concern involves the implications that this permitting process may have concerning the owner-operator relationships involved at the terminal. Because modifications may be required on some of the tanks or other facilities, lease agreements may be affected. We will discuss this problem and others at our upcoming meeting.

For our services in compiling the information needed and in filing the operation permit application we have estimated the cost to be \$7,500, including that spent to date. However, in the event that any portions of the facility are found not to be in compliance with existing standards, a permit to construct modifications will be necessary. It is likely that the loading rack will require such modifications. When these determinations are made a separate estimate will be supplied for this service.

Sincerely,



Edward E. Clark, Ph.D., P.E.

TEL:EEC:pm
8015.

3301 GUN CLUB ROAD
P.O. BOX 3858
WEST PALM BEACH, FLORIDA 33402



BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

WARREN G. STRAHM
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA SUBDISTRICT

Mr. Peter W. Moldenhauer, Engineer
Belcher Oil Company
Post Office Box 1751
Miami, Florida, 33101

AP - Broward County
Port Everglades Facilities

Dear Mr. Moldenhauer:

Re: Bulk Gasoline Terminal(s) and Petroleum Liquid Storage Vessel(s)

It has come to our attention that your company operates the subject air pollution source(s) without a current valid State air pollution operation permit.

Section 403.087(1), Florida Statutes, states, in part:
"No stationary installation which will reasonably be expected to be a source of air or water pollution shall be operated, maintained, constructed, expanded or modified without an appropriate and currently valid permit issued by the Department..."

In accordance with the above Statute, it has been determined that the subject facility requires an operation permit. Therefore, we are enclosing Department of Environmental Regulation (DER) Form 17-1.122(16) - Application to Operate/Construct Air Pollution Sources, information summaries of specific requirements for the subject facility, and a form for indicating a compliance schedule (if modifications are needed to meet the requirements).

Please complete the enclosed forms and return them as soon as possible to this office, along with an application fee check in the amount of twenty dollars (\$20.00). Applications are required to be submitted in quadruplicate (each with original seals and signatures).

Should any questions arise please do not hesitate to contact Mr. Tom Tittle of this office, telephone 305/689-5800.

Sincerely,

Roy M. Duke Jr.

Roy M. Duke, Jr., P.E.
Permitting Section Head

*CALLED 1/22/80 INFORMED
ON TIME SPAN APPROX 4WK'S*

RMD:tts

Enclosures

original typed on 100% recycled paper

cc: Broward County Environmental Quality Control Board

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR POLLUTION RULE

INFORMATION SUMMARY

REQUIREMENTS FOR BULK GASOLINE TERMINALS LOCATED IN: DADE, BROWARD
AND PALM BEACH COUNTIES, SEE 17-2.16, F.A.C.

Terminals with average daily throughput of 20,000 gallons or more:

- . Must comply by July 19, 1981
- . Emission Limiting Standard:
Control equipment cannot emit more than 4.7 grains per
gallon gasoline loaded
- . Control Technology:
Vapor control system or vapor collection system which
directs all vapors to a fuel system

Means to prevent liquid waste from loading lines

Vapor-tight loading system

For further information call: Tom Tittle, 305/689-5800

COMPLIANCE SCHEDULE

Date

_____ Submittal of construction permit application(s) for
modification(s) required to comply with 17-2.16, F.A.C.

_____ Award contract for required modification(s)

_____ Initiation of construction of required modification(s)

_____ Completion of construction of required modification(s)

_____ Submittal of certification of completion of construction
or application to operate; including, if applicable, results
of tests conducted in a manner acceptable to the Department
to demonstrate compliance with 17-2.16, F.A.C.

Briefly describe nature of modifications (e.g. retrofit 3 tanks and
1 loading rack) _____

Additional comments: _____

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR POLLUTION RULE

INFORMATION SUMMARY

REQUIREMENTS FOR PETROLEUM LIQUID STORAGE VESSELS LOCATED IN: DADE,
BROWARD AND PALM BEACH COUNTIES, SEE 17-2.16, F.A.C.

Fixed roof storage vessels with capacities of 42,000 gallons or more containing petroleum liquids (not including No. 2 through No. 6 fuel oils, gas turbine fuel oils No. 2-GT through No. 4-GT, or diesel fuel oils No. 2-D and No. 4-D) whose true vapor pressure is greater than 1.5 psia and less than 11.0 psia under actual storage conditions.

- . Must comply by July 19, 1981
- . Control Technology:
Internal floating roof or an equally effective alternative control equipped and maintained in accordance with the requirements of 17-2, F.A.C.

For further information call: Tom Tittle, 305/689-5800

3301 GUN CLUB ROAD
P.O. BOX 3858
WEST PALM BEACH, FLORIDA 33402



BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

WARREN G. STRAHM
SUBDISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA SUBDISTRICT

Mr. Peter W. Moldenhauer, Engineer
Belcher Oil Company
Post Office Box 1751
Miami, Florida, 33101

AP - Broward County
Port Everglades Facilities

Dear Mr. Moldenhauer:

Re: Bulk Gasoline Terminal(s) and Petroleum Liquid Storage Vessel(s)

It has come to our attention that your company operates the subject air pollution source(s) without a current valid State air pollution operation permit.

Section 403.087(1), Florida Statutes, states, in part:
"No stationary installation which will reasonably be expected to be a source of air or water pollution shall be operated, maintained, constructed, expanded or modified without an appropriate and currently valid permit issued by the Department..."

In accordance with the above Statute, it has been determined that the subject facility requires an operation permit. Therefore, we are enclosing Department of Environmental Regulation (DER) Form 17-1.122(16) - Application to Operate/Construct Air Pollution Sources, information summaries of specific requirements for the subject facility, and a form for indicating a compliance schedule (if modifications are needed to meet the requirements).

Please complete the enclosed forms and return them as soon as possible to this office, along with an application fee check in the amount of twenty dollars (\$20.00). Applications are required to be submitted in quadruplicate (each with original seals and signatures).

Should any questions arise please do not hesitate to contact Mr. Tom Tittle of this office, telephone 305/689-5806.

Sincerely,

Roy M. Duke Jr.

Roy M. Duke, Jr., P.E.
Permitting Section Head

*CALLED 1/22/80 INFORMED
ON TIME SPAN APPROX 4WK'S*

RMD:tts

Enclosures

original typed on 100% recycled paper

cc: Broward County Environmental Quality Control Board

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR POLLUTION RULE

INFORMATION SUMMARY

REQUIREMENTS FOR BULK GASOLINE TERMINALS LOCATED IN: DADE, BROWARD
AND PALM BEACH COUNTIES, SEE 17-2.16, F.A.C.

Terminals with average daily throughput of 20,000 gallons or more:

- . Must comply by July 19, 1981
 - . Emission Limiting Standard:
Control equipment cannot emit more than 4.7 grains per
gallon gasoline loaded
 - . Control Technology:
Vapor control system or vapor collection system which
directs all vapors to a fuel system
- Means to prevent liquid waste from loading lines
- Vapor-tight loading system

For further information call: Tom Tittle, 305/689-5800

COMPLIANCE SCHEDULE

Date

_____ Submittal of construction permit application(s) for
modification(s) required to comply with 17-2.16, F.A.C.

_____ Award contract for required modification(s)

_____ Initiation of construction of required modification(s)

_____ Completion of construction of required modification(s)

_____ Submittal of certification of completion of construction
or application to operate; including, if applicable, results
of tests conducted in a manner acceptable to the Department
to demonstrate compliance with 17-2.16, F.A.C.

Briefly describe nature of modifications (e.g. retrofit 3 tanks and
1 loading rack) _____

Additional comments: _____

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR POLLUTION RULE

INFORMATION SUMMARY

REQUIREMENTS FOR PETROLEUM LIQUID STORAGE VESSELS LOCATED IN: DADE,
BROWARD AND PALM BEACH COUNTIES, SEE 17-2.16, F.A.C.

Fixed roof storage vessels with capacities of 42,000 gallons or more containing petroleum liquids (not including No. 2 through No. 6 fuel oils, gas turbine fuel oils No. 2-GT through No. 4-GT, or diesel fuel oils No. 2-D and No. 4-D) whose true vapor pressure is greater than 1.5 psia and less than 11.0 psia under actual storage conditions.

- . Must comply by July 19, 1981
- . Control Technology:
Internal floating roof or an equally effective alternative control equipped and maintained in accordance with the requirements of 17-2, F.A.C.

For further information call: Tom Tittle, 305/689-5800

Belcher Oil Company-Port Everglades

Gasoline Bulk Terminal

Broward County

The construction application has been reviewed by the Department. Public notice of the Department's intent to issue was published in the Ft. Lauderdale News on November 13, 1982. The preliminary determination and technical evaluation were available for public inspection at the DER Southeast Florida District Office, the DER Bureau of Air Quality Management Office, and the Broward County Environmental Quality Control Board Office.

The following comments requesting revisions in two Specific Conditions were received from Mr. Tom Tittle with the DER Southeast Florida District Office:

Specific Conditions:

#1. From: Maximum allowable VOC emissions from the loading rack/vapor recovery system shall not exceed 15.7 lbs/hr (27.7 milligrams/liter, 1.62 grains/gallon) and 17.4 TPY (tons per year) of gasoline loaded.

To: Maximum allowable VOC emissions from the loading rack/vapor recovery system shall not exceed 27.7 milligrams/liter (1.62 grains/gallon, equivalent to 15.7 lbs/hr at maximum loading rate) and 17.4 TPY (tons per year) based on gasoline loaded.

#3. From: The average gasoline loading rate of the loading rack, total of the two loading positions, shall not exceed 68,000 gallons per hour.

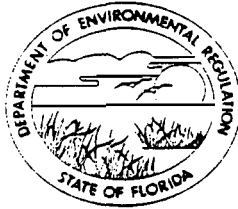
To: The maximum gasoline loading rate of the loading rack, total of the two loading positions, is 68,000 gallons per hour. Total annual gasoline throughput at the rack shall not exceed 3,600,000 barrels per year (bbls/yr).

Attachment #5. Interoffice Memorandum from Tom Tittle dated December 16, 1982.

The Bureau agrees with the comments and will incorporate these changes in the Specific Conditions of the Construction Permit AC 06-58230 in the final determination. It is recommended that the construction permit be issued as drafted, with the above revisions and Attachment incorporated.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

APPLICANT:

Belcher Oil Company
Port Everglades Bulk Gasoline Terminal
P. O. Box 525500
Fort Lauderdale, Florida 33152

PERMIT/CERTIFICATION
NO. AC 06-58230

COUNTY: Broward

PROJECT: Vapor Recovery
Unit for Bulk Gasoline
Terminal Loading Rack.

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

For the construction/installation of a vapor recovery unit for servicing the gasoline loading rack at the applicant's existing facility located at 2401 Eisenhower Blvd., Fort Lauderdale, Florida. The UTM coordinates are Zone 17-587.3 km East and 2886.3 km North.

Construction shall be in accordance with the permit application and plans, documents, amendments, and drawings except as otherwise noted on pages 3 and 4 of the "Specific Conditions".

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).
2. C. H. Fancy's Letter of Incompleteness dated August 6, 1982.
3. John McNally's letter of response dated September 24, 1982.
4. Attachment to Specific Condition No. 5.
5. Interoffice Memorandum from Tom Tittle dated December 16, 1982.

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

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 Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court 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 indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. 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 non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. 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.
4. As provided in subsection 403.087(6), 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.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. 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 Section 403.111, F.S.
7. In the case of an operation permit, 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.
8. 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, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.
13. This permit also constitutes:
 - Determination of Best Available Control Technology (BACT)
 - Determination of Prevention of Significant Deterioration (PSD)
 - Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

SPECIFIC CONDITIONS:

1. Maximum allowable VOC emissions from the loading rack/vapor recovery system shall not exceed 27.7 milligrams/liter (1.62 grains/gallon, equivalent to 15.7 lbs/hr at maximum loading rate) and 17.4 TPY (tons per year) based on gasoline loaded.
2. Compliance with the mass emission limitation of Specific Condition No. 1 shall be determined in accordance with the method referred in 17-2.700(6)(c)2.b.(i), FAC (EPA 450/2-77-026, Appendix A). At least 30 days prior to the date of compliance testing, the DER Southeast Florida District Office or its designee shall be notified in order to witness the test.
3. The maximum gasoline loading rate of the loading rack, total of the two loading positions, is 68,000 gallons per hour. Total annual gasoline throughput at the rack shall not exceed 3,600,000 barrels per year (bbls/yr).
4. Annual operating reports shall be submitted to the DER Southeast Florida District Office or its designee. This report shall contain records of the gasoline throughput.
5. During the compliance test, the gasoline loading rate shall be representative of "normal operation" as outlined in the attached EPA test method guideline, EPA 450/2-77-026, Appendix A, section 5-2.
6. Prior to 90 days before the expiration of this permit a complete application for an operating permit and compliance test results shall be submitted to the DER Southeast Florida District Office or its designee. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration or receipt of an operating permit.

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

Expiration Date: June 1, 1983

Issued this 22 day of December, 1982

1 Pages Attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Terry Cole
Signature

PAGE 4 OF 4

ATTACHMENT 4

5.2 Terminal Status During Test Period

The test procedure is designed to measure control system performance under conditions of normal operation. Normal operation will vary from terminal-to-terminal and from day-to-day. Therefore, no specific criteria can be set forth to define normal operation. The following guidelines are provided to assist in determining normal operation.

5.2.1 Closing of Loading Racks

During the test period, all loading racks shall be open for each product line which is controlled by the system under test. Simultaneous use of more than one loading rack shall occur to the extent that such use would normally occur.

5.2.2 Simultaneous use of more than one dispenser on each loading rack shall occur to the extent that such use would normally occur.

5.2.3 Dispensing rates shall be set at the maximum rate at which the equipment is designed to be operated. Automatic product dispensers are to be used according to normal operating practices.

5.3 Vapor Control System Status During Tests

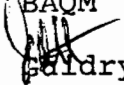
Applicable operating parameters shall be monitored to demonstrate that the processing unit is operating at design levels. For intermittent vapor processing units employing a vapor holder, each test repetition shall include at least one fully automatic operation cycle of the vapor holder and processing device. Tank trucks shall be essentially leak free as determined by EPA Mobile Source Enforcement Division.

ATTACHMENT 5

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: Bruce Mitchell, CBAQM
FROM: Tom Tittle/John  Galdry
DATE: December 16, 1982
SUBJECT: Application No. AC06-58230, Belcher Oil Gasoline Loading Rack

As discussed this morning, we are enclosing the suggested changes to specific conditions 1 and 3.

JG:ttbj

PERMIT NO.: AC 06-58230

APPLICANT: Belcher Oil Company-Port Everglades Bulk Gasoline Terminal

SPECIFIC CONDITIONS:

1. Maximum allowable VOC emissions from the loading rack/vapor recovery system shall not exceed 27.7 milligrams/liter (1.62 grams/gallon, equivalent to 15.7 lbs/hr at max. loading rate) and 17.4 TPY (tons per year) based on gasoline loaded.
2. Compliance with the mass emission limitation of Specific Condition No. 1 shall be determined in accordance with the method referred in 17-2.700(6)(c)2.b.(i), FAC (EPA 450/2-77-026, Appendix A). At least 30 days prior to the date of compliance testing, the DER Southeast Florida District Office or its designee shall be notified in order to witness the test.
3. The maximum gasoline loading rate of the loading rack, total of the two loading positions, is 68,000 gallons per hour. Total annual gasoline throughput at the rack shall not exceed 3.6 million barrels/yr.
4. Annual operating reports shall be submitted to the DER Southeast Florida District Office or its designee. This report shall contain records of the gasoline throughput.
5. During the compliance test, the gasoline loading rate shall be representative of "normal operation" as outlined in the attached EPA test method guideline, EPA 450/2-77-026, Appendix A, section 5-2.
6. Prior to 90 days before the expiration of this permit a complete application for an operating permit and compliance test results shall be submitted to the DER Southeast Florida District Office or its designee. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration or receipt of an operating permit.

Bruce,

John McNally copied

T.M.

Avoid Verbal Orders

"SAY IT IN WRITING"

No. 169

Date 12-16-82

To John J. McNally

Clark Engineers-Scientists, Inc.

7520 SW 57 Avenue

Miami, FL 33143

BRUCE MITCHELL SUCCEEDED I COPY YOU WITH

OUR RECOMMENDATIONS ON THE WORDING OF THE

SPECIFIC CONDITIONS (ATTACHED).

Signed

T.M. Little

