Florida Department of Environmental Regulation
Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

NOTICE OF PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

October 10, 1990

In the Matter of an Application for Permit by:
Mr. J. W. Peavy, President
Central Florida Hot-Mix, Inc.
P.O. Box 1823
Eaton Park, Florida 33840

DER File No. AO53-182674
Polk County

40TPA530151

Enclosed is permit number AO53-182674 to operate an asphalt batch plant with a baghouse located at 3350 Reynolds Road, Eaton Park, issued pursuant to Section 403, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition 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.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

PERMITTEE:
Central Florida Hot-Mix, Inc.
P.O. Box 1823
Eaton Park, FL. 33840

PERMIT/CERTIFICATION
Permit No: AO53-182674
County: Polk
Expiration Date: 10/10/95
Project: Asphalt Batch Plant

SPECIFIC CONDITIONS:

10. Central Florida Hot-Mix, Inc. shall notify the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-2.700(2)(a)9., F.A.C.].

11. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling.

12. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.].

13. Four applications to renew this operating permit shall be submitted to the Southwest District Office of the Department of Environmental Regulation by August 11, 1995. [Rule 17-4.090, F.A.C.].

Issued this 9 day of
Oct., 19 95.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dr. Richard D. Garrity
Deputy Assistant Secretary
4520 Oak Fair Boulevard
Tampa, Florida 33610-7347
Phone (813) 623-5561

(e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order 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 32399-2400; 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 the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Gary A. Maier

Gary A. Maier, BS ChE, JD

copy to: John W. Bottorf, Jr., P.E.
at Bottorf & Associates, Inc.
4595 Parkbreeze Ct.
Orlando, Florida 32808-1057

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 10-10-90 to the listed persons.

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

Jean Liebesta
Clerk

10-10-90
Date

Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

PERMITTEE:
Central Florida Hot-Mix, Inc.
P.O. Box 1823
Eaton Park, FL. 33840

PERMIT/CERTIFICATION
Permit No: AO53-182674
County: Polk
Expiration Date: 10/10/95
Project: Asphalt Batch Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 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 operation of a 75 ton per hour asphalt batch plant. The asphalt plant burner is fired with natural gas (only) at a maximum heat input rate of 40 MM Btu per hour. Particulate matter emissions are controlled by a Todd model MP10-252 baghouse. The raw material utilized in the plant may be 100% virgin or up to 17% recycle asphalt.

Location: 3350 Reynolds Road, Eaton Park, Polk County

UTM: 17-412.5 E 3097.7 N NEDS NO: 0151 Point ID: 01

Replaces Permit No.: AO53-107391

PERMITTEE:
Central Florida Hot-Mix, Inc.
P.O. Box 1823
Eaton Park, FL. 33840

PERMIT/CERTIFICATION
Permit No: AO53-182674
County: Polk
Expiration Date: 10/10/95
Project: Asphalt Batch Plant

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.

2. Particulate matter emissions from the baghouse shall not exceed 0.04 grains per dry cubic foot at standard conditions. [Rule 17-2.660, F.A.C. and 40 CFR 60.92(a)(1)].

3. Visible emissions from the baghouse shall not be equal to or greater than 20% opacity. [Rule 17-2.660, F.A.C. and 40 CFR 60.92(a)(2)].

4. Central Florida Hot-Mix, Inc. shall not discharge air pollutants which cause or contribute to an objectionable odor. [Rule 17-2.620(2), F.A.C.].

5. As requested by the permittee, the hours of operation for the asphalt plant shall not exceed 8 hours per day, 5 days per week, or 50 weeks per year (2,000 hours per year).

6. This source is permitted to burn only natural gas.

7. Test the baghouse exhaust for the following pollutants at intervals of 12 months from the date June 12, 1990 and submit a copy of the test data to the Air Section of the Southwest District Office of the Department within 45 days of testing [Rule 17-2.700(2), F.A.C.]:

(X) Opacity
(X) Particulates

8. Compliance with the emission limitations of Specific Conditions #2 and #3 shall be determined using EPA Methods 1, 2, 3, 4, 5, and 9 contained in 40 CFR 60, Appendix A, and adopted by reference in Rule 17-2.700, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 17-2.700, F.A.C. and 40 CFR 60, Appendix A.

9. Testing of baghouse emissions must be accomplished while the asphalt plant is operating within $\pm$10% of maximum permitted process rate of 75 tons per hour, and while the asphalt plant burner is operating within $\pm$10% of the maximum permitted heat input rate of 40 MM Btu per hour. A compliance test submitted at operating rates less than 90% of the permitted maximum rates will automatically constitute an amended permit at the lesser rate until another test showing compliance at a higher rate is submitted. Failure to submit the actual operating rates may invalidate the test. [Rule 17-4.070(3), F.A.C.].

0151 02

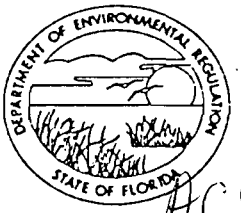
D.E.R.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

FEB 19 1993

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

SOUTHWEST DISTRICT TAMPA

AC 53-226426

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Asphalt Batch Plant [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Central Florida Hot Mix, Inc. COUNTY: Polk

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) Asphalt Plant #2 w/Baghouse

SOURCE LOCATION: Street 3350 Reynolds Rd. City Eaton Park

UTM: East 17-412.5 KM North 3097.7 KM

Latitude 28 ° 00 ' 12 "N Longitude 81 ° 53 ' 25 "W

APPLICANT NAME AND TITLE: Joe A. Lanier, Secretary/Treasurer

APPLICANT ADDRESS: P.O. Box 1823, Eaton Park, Florida 33840

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Central Florida Hot Mix, Inc.

I certify that the statements made in this application for a 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: Joe A. Lanier

Joe A. Lanier, Secretary/Treasurer
Name and Title (Please Type)

Date: 2-15-93 Telephone No. 813/665-2182

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)

2000 hrs/yr

E. Requested permitted equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 50 ;

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? NO

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

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

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. NO

3. Does the State "Prevention of Significant Deterioriation" (PSD) 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? YES

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? NO

G. 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 justification for any answer of "No" that might be considered questionable.

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)
Cyclone (Herman Grant	Particulate	85%	2.5 and Larger	AP40
Mfg. Co., Serial #5842)				
Baghouse (Flex-Kleen	Particulate	99.9%	1.0 and Larger	AP40
Model #84UDSM704XLA)				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
* #5 On-Spec Used Oil	450	500	72.5
or virgin/new No. 5			

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

Fuel Analysis:

Percent Sulfur: 0.6 Percent Ash: 0.6

Density: 7.43 lbs/gal Typical Percent Nitrogen: Nil

Heat Capacity: 19,515 BTU/lb 145,000 BTU/gal

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

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.

There will be no liquid waste generated with asphalt productions. Used bags from the baghouse will be the only solid waste generated and they will be disposed of at the county landfill.

* This is a blend of virgin #6 oil and used motor oil. (See fuel oil analysis enclosed)

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.

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

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:

[1]Explain method of determining efficiency.
[2]Energy 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:

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

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____no. sites _____ TSP _____( ) SO^2* _____ Wind sp/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).

CENTRAL FLORIDA HOT MIX, INC.

EMISSION RATE CALCULATIONS

Based on the following:

1. Particulate emissions are based on the NSPS limit of 0.04 GDSCF and an estimated standard exhaust volume of 26,772 DSCFM.
2. 500 Gal/Hr. No. 5 Oil, Max. with 0.6% Sulfur Max.
3. 2000 Hrs/Yr. of operation.
4. AP42, Table 1.3-1 for Fuel related emissions.

No.2 / Diesel Generator — 40 gals/hr — Facility

Particulate = (0.04 GDSCF)(26,772 DSCFM)(60 Min/Hr.) $\left(\frac{1 \text{ Lb.}}{7000 \text{ Grains}}\right)$ = 9.18 Lbs/Hr. — 0.08 lbs/hr — 9.26

(9.18 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 9.18 Tons/Yr. — 0.09 TPY — 9.26

SO2 = (157)(.6) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 47.1 Lbs/Hr. — 2.84 — 49.94

(47.1 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 47.1 Tons/Yr. — 2.84 — 49.94

CO = (5 Lbs/1000 Gal) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 2.5 Lbs/Hr. — 0.2 — 2.7

(2.5 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 2.5 Tons/Yr. — 0.2 — 2.7

NOX = (55 Lbs/1000 Gal.) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 27.5 Lbs/Hr. — 0.8 — 28.3

(27.5 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 27.5 Tons/Yr. — 0.8 — 28.3

Non Methane

VOC = (0.28 Lbs/1000 Gal.) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 0.14 Lbs/Hr.

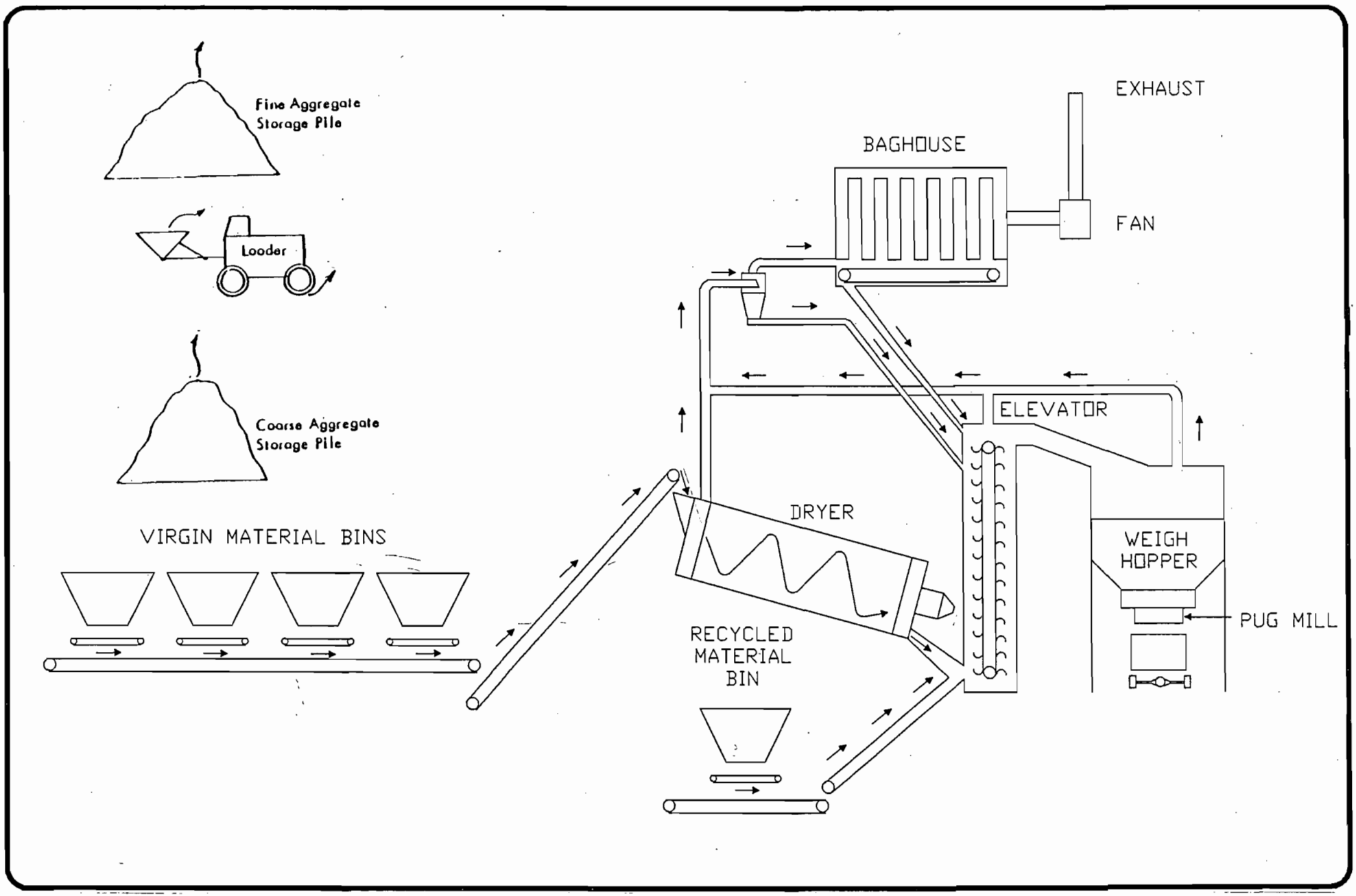
(0.14 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 0.14 Tons/Yr.

Lead = $\frac{600 \text{ PPM}}{1{,}000{,}000}$ (500 GPH)(7.43 Lbs/Gal)(1-.999) = 0.0022 Lbs/Hr.

(0.0022 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 0.0022 Tons/Yr.

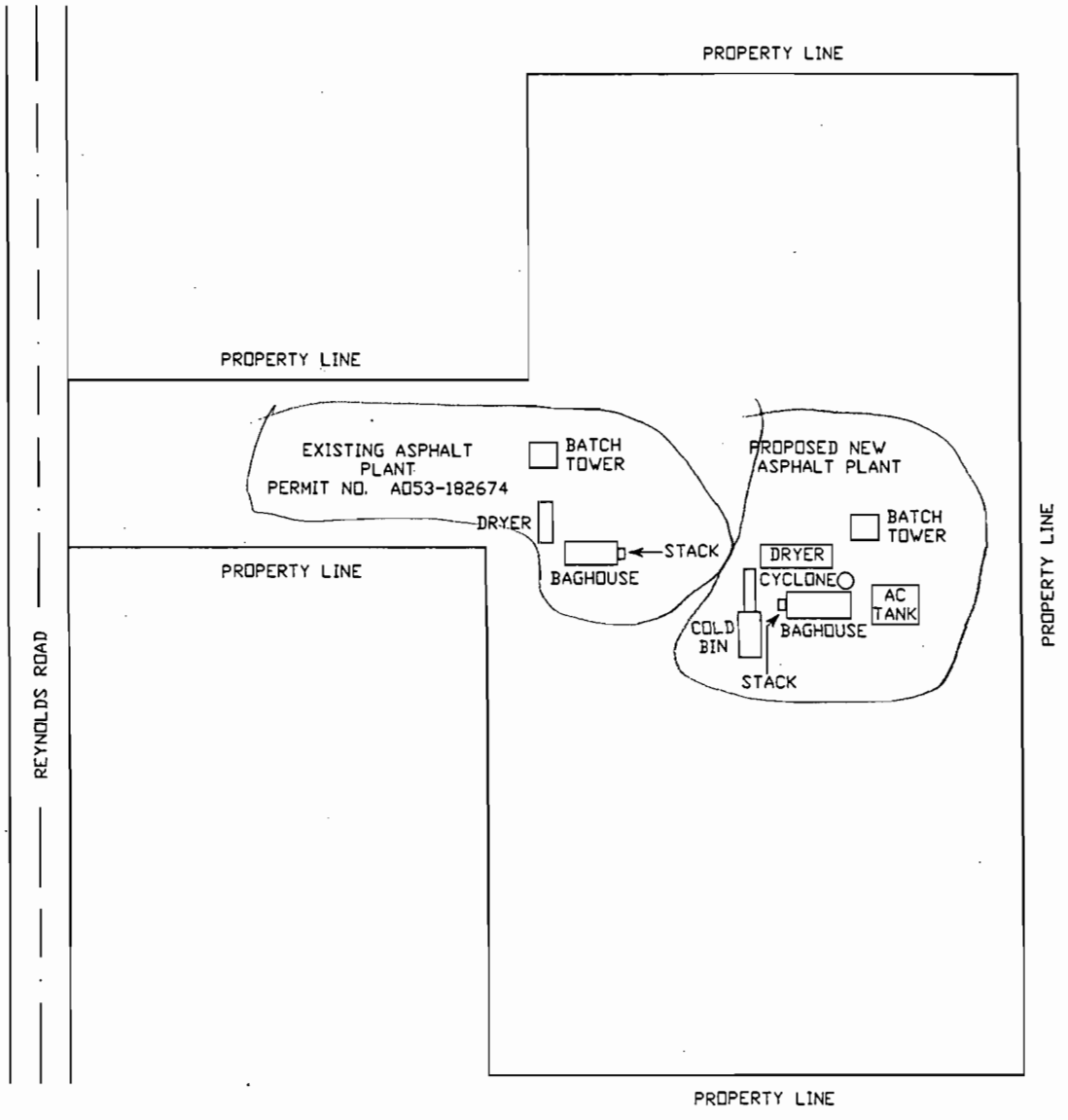
Methane $\frac{1.0}{0.28} \sim \frac{x}{0.14} \Rightarrow$ 0.5 lbs/hr + 0.00232 = (0.5) THC

0.5 TPY + 0.00232 = (0.5)



The Paving Company, Inc.

Process/Operations flow diagram 03/05/92

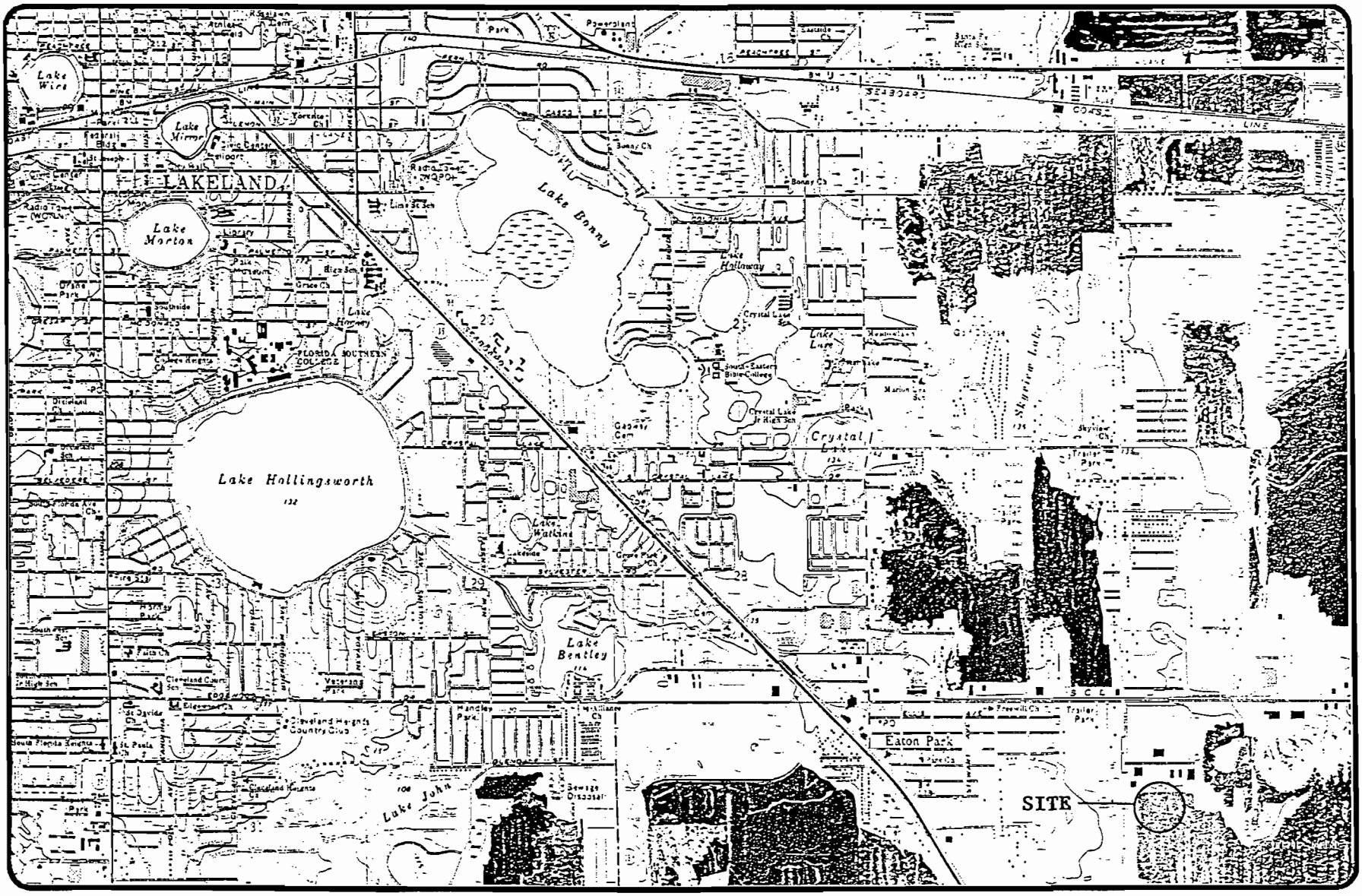


BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS—ANALYTICAL LABORATORY
6729 EDGEWATER COMMERCE PARKWAY ORLANDO, FLORIDA 32810-4278
PHONE: (407) 298-0646

CENTRAL FLORIDA HOT MIX, INC.
EATON PARK, POLK COUNTY, FLORIDA

DATE:	REVISION:

DRAWN BY:	KDB	DATE: 2/8/93	645-4
REVIEWED BY:	RTC	VERSION: 10/386	
SCALE:	NO SCALE	FILENAME: SITE645	PROJECT NO.



LOCATION MAP

BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS—ANALYTICAL LABORATORY
6789 EDGEWATER COMMERCE PARKWAY, ORLANDO, FLORIDA 32810-4878
PHONE: (407) 298-7846

CENTRAL FLORIDA HOT MIX, INC.

EATON PARK, POLK COUNTY, FLORIDA

DATE:	REVISION:

DRAWN BY: USGS	DATE:
REVIEWED BY: RTC	VERSION: 10/386
SCALE: 1:24,000	FILENAME: MAPBRDR

645
PROJECT NO.

INTERNATIONAL PETROLEUM CORPORATION

TYPICAL

SPECIFICATIONS FOR RE-REFINED

#5 FUEL OIL

API GRAVITY 60°F	26 - 28	
VISCOSITY SSU @ 100°F	250	
SULPHUR	.4 ÷ .6 %	
POUR	0° F	
FLASHPOINT	150° F MIN.	
WATER BY DISTILATION	TRACE	
SEDIMENT BY EXTRACTION	1% MAX	
TOTAL BOTTOM SEDIMENT AND WATER NOT TO EXCEED	1% MAX	
TOTAL HALOGENS (TOX) ORGANIC AND INORGANIC	600 PPM	1000/4000
LEAD	90 PPM	100
ARSENIC	2.5 PPM	5
CADIUM	1.0 PPM	2
CHROMIUM	5.0 PPM	10
PCB'S	BDL	

ALL PRODUCTS MEET STATE AND FEDERAL STANDARDS FOR ON SPECIFICATION FUEL.

BTUs/gal 145,000

105 South Alexander Street, Plant City, Florida 33566

CAPACITY OF DRIER

NOMINAL RATED CAPACITY OF CEDARAPIDS DRIERS

Based on conditions as specified*
Tons Per Hour of Dried Aggregate

DRIER MODEL		3612-P	4820-P	6422-P		7224-B	8026	8828-B		10028	10032	11032		
EXHAUST SYSTEM CFM		5,000	10,000	18,000	21,000	23,000	28,000	35,000	40,000	45,000	50,000	55,000	60,000	66,000
PERCENT OF FREE MOISTURE (SURFACE COATING) IN COMBINED AGGREGATE FEED	3%	44	87	157	183	200	240	305	347	392	436	480	523	576
	4%	36	72	129	151	165	200	250	287	323	359	395	431	474
†PUBLISHED RATINGS BASED ON REMOVAL OF 5% FREE MOISTURE	†5%	30	60	110	130	140	170	215	245	275	305	335	365	405
	6%	26	53	95	111	122	148	186	212	239	265	292	318	350
	7%	23	47	84	98	107	130	163	186	210	233	256	280	308
→	8%	21	41	74	87	95	116	145	166	186	207	228	248	273
	9%	19	37	67	78	86	104	130	149	168	186	205	224	246
	10%	18	34	61	71	79	94	118	136	153	170	190	203	225
	11%	15	31	56	65	71	86	108	124	139	155	170	186	204
	12%	14	28	51	59	65	79	89	113	127	142	156	170	187
CONSUMPTION** BURNER FUEL		GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH
	NOMINAL	55	110	195	225	245	300	375	435	485	540	590	645	710
	MAXIMUM	65	125	225	265	290	350	440	500	565	630	690	750	830

*Drier Rating Conditions
a. Aggregate discharge temp. 300° F.
b. Exhaust Gas Exit Temp. 300° F.
c. Std. Atmospheric Pressure 760mm HG.
d. 25% Excess Combustion Air
e. 10% of Exhaust System CFM use by plant fugitive dust system
f. Specific heat of aggregate — 0.22 BTU per lb. per degree F.
g. Aggregate gradation per AASHO Guide Spec. 703.09 Grading A, B or C
h. Ratings reduce 3% per 1,000 ft. above 1,000 ft. elevation
j. Drier slope adjusted to maintain drum loading
k. Capacity at moisture contents not shown subject to additional factors.

**Burner Fuel Consumption figures shown above are estimates for heavy oil. (150,000 B.T.U. per gal.) Nominal valves are for 5% free moisture removal. Maximum values are for severest listed condition.
For other fuels, multiply GPH of heavy oil by factor given below for each fuel to obtain its estimated consumption rate.

Fuel	Chart GPH	Factor		Rate
Light Oil (140,000 BTU/Gal.)	.....	x 1.07 =	.....	GPH
Propane — Liquid (91,800 BTU/Gal.)	.....	x 1.63 =	.....	GPH
Propane — Vaporized (2,500 BTU/Cu. Ft.)	.....	x 60 =	.....	GPH
Butane — Liquid (102,400 BTU/Gal.)	.....	x 1.46 =	.....	GPH
Butane — Vaporized (3,200 BTU/Cu. Ft.)	.....	x 47 =	.....	GPH
Natural Gas (1,000 BTU/Cu. Ft.)	.....	x 150 =	.....	SCFH

The capacity is rated in output tons per hour based on removal of 5% free moisture at 300° F. exhaust and rock discharge temperature. Capacity will vary depending upon type and size of aggregate and amount of internal and external moisture to be evaporated. Capacities will also be reduced approximately 3% for each 1000 ft. above sea level. The above chart gives the capacity of drier for various percentage of moisture in the cold feed aggregates.

Internal moisture in the aggregates is considerably more difficult to remove than external moisture and will usually reduce drier capacity below the free (external) moisture ratings given.

NOTE — Reducing the tonnage of material to the drier has no appreciable effect on removing the internal moisture when the drier is being operated within its rated capacity.

The following formula should be used to determine the percentage of moisture in cold feed material fed to the drier. It is important to draw truly representative samples which accurately reflect the portion of the stockpile that is being dried.

FORMULA:

$$\frac{\text{Wet Weight} - \text{Dry Weight}}{\text{Wet Weight}} = \%\ \text{of Moisture}$$

EXAMPLE:

$$\frac{100\ \text{Lbs.} - 92\ \text{lbs.}}{100\ \text{Lbs.}} = .08\ (8\%)$$

ASTEC a Division of Astec Industries, Inc.

October 28, 1992

Mr. J.W. Peavy
Central Florida Hot Mix Inc.
P.O. Box 1823
Eaton Park, Florida 33840

RE: Contract No. 760-92

Dear Mr. Peavy:

This letter is to confirm the recent purchase of the following used equipment:

ONE (1) USED CEDARAPIDS 6,000# BATCH PLANT:

Cold Feed System:	four (4) bin (A.E. Finley) cold feed system with 30" belt feeders, 36" collecting conveyor, and 24 x 60' charging conveyor.
Dryer Drum Unit:	88" x 28' Cedarapids portable dryer with belly chain drive. Genco FP-103 automatic burner, on heavy oil.
Dust Collector:	Primary cyclone with Flexoclean Portable Baghouse. Pluse-Jet type cleaning with dust screw augers (3) in the bottom feeding a cross screw feeding back to the hot elevator. 150 hp exhaust fan and aircompressor mounted on the portable frame.
Hot Elevator:	Incline enclosed bucket elevator.
Screen Section:	CR 48" x 9'9" Multi-Deck Cedarapids screen system.
Hot Bin Section:	Est 35 Ton capacity of all (4) four hot bins. Portable unit.
Pugmill Section:	6,000# Twin shaft Cedarapids mixer. Portable unit.
Control System:	Electric over air.
Automation:	Computer automation system with manual back-up system. All mounted in a fixed control house.
Electrical:	All starters and breakers included. Wiring is portable rubber cable quick disconnect.

Flex-Kleen
Research-Cottrell
165 N. Canal St.
Chicago, Illinois 60606
(312) 648-5300/Telex No. 254254

SPARE PARTS LIST

SPARE PARTS LIST
For One Unit Only

BOTTOM BAG REMOVAL -

DATE : 12/24/92

FOR : Central Florida Hot Mix Inc

YOUR P.O. NO. :

FLEX-KLEEN MODEL NO. 84UDSM704XLA

OUR JOB NO. 3420

	QUANTITY	ITEM	NUMBER	
1 Bags		12 oz. Polyester		
		16 oz. Polyester		
		16 oz. Polyester - SS Ground Wire		
	704	86" 14 oz. Nomex	B12110	
		12 oz. Polypropylene		
		16 oz. Polypropylene		
2 Bag Cages	32	84" Mild Steel	C10111	
		Mild Steel Epoxy Coated		
		304L Stainless Steel		
		316L Stainless Steel		
3 Bag Clamps	30	Bag Clamp, Hex Head, SS	M12108	
		Bag Clamp, Quick Release, SS	M12803	
4 Timer	1	Solid State Timer (Without Enclosure)	T16054	
5 Gauges	1	Differential Pressure Gauge 0-15' W.G.	E21401	
6 Diaphragm Valves	5	Diaphragm Valve - 3/4"	M14909	
	5	Replacement Diaphragm Kit for M14909	K10102	
		Diaphragm Valve - 1"	M28118	
		Replacement diaphragm Kit for M28118	K17427	
7 Solenoid Valves		Solenoid Pilot Valve	E24104	
	5	Solenoid Valve	Y19116	

See reverse side for identification of above spare parts. FORM 4

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

APPLICATION FOR RENEWAL OF PERMIT TO OPERATE AIR POLLUTION SOURCE(S)

If major alterations have occurred, the applicant should complete the Standard Air Permit Application Form.

Source Type: ASPHALT BATCH PLANT Renewal of DER Permit No. A053-107391

Company Name: CENTRAL FLORIDA HOT-MIX, INC. County: POLK

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):

75TPH ASPHALT BATCH PLANT WITH BAGHOUSE

Source Location: Street: 3350 REYNOLDS ROAD City: EATON PARK

UTM: East 17-412.5 KM North 3097.7 KM

Latitude: 28° 00' 12"N. Longitude: 81° 53' 25"W.

1. Attach a check made payable to the Department of Environmental Regulation in accordance with operation permit fee schedule set forth in Florida Administrative Code Rule 17-4.05. $1,500.00

2. Have there been any alterations to the plant since last permitted? [X] Yes [ ] No If minor alterations have occurred, describe on a separate sheet and attach.

3. Attach the last compliance test report required per permit conditions if not submitted previously. 6-5-90 TEST REPORT ATTACHED.

4. Have previous permit conditions been adhered to? [X] Yes [ ] No If no, explain on a separate sheet and attach.

5. Has there been any malfunction of the pollution control equipment during tenure of current permit? [X] Yes [ ] No If yes, and not previously reported, give brief details and what action was taken on a separate sheet and attach.

6. Has the pollution control equipment been maintained to preserve the collection efficiency last permitted by the Department? [X] Yes [ ] No

7. Has the annual operating report for the last calendar year been submitted? [X] Yes [ ] No If no, please attach.

8. Please provide the following information if applicable:

A. Raw Materials and Chemical Used in Your Process:

Description	Contaminant Type	Contaminant %Wt	100% VIRGIN Rate	OR 17% RECYCLE Utilization lbs/hr
LIMEROCK & SAND	PARTICULATE		141,000	117,030
ASPHALT AC20	NONE		9,000	7,470
RECYCLE ASPHALT (UP TO 17%)	PARTICULATE		0	25,500

B. Product Weight (lbs/hr): 150,000

C. Fuels

Type (Be Specific)	Consumption* Avg/hr*	Max/hr**	Maximum Heat Input (MMBTU/hr)
NATURAL GAS	.023	.039	40.0

D. Normal Equipment Operating Time: hrs/day 8; days/wk 5; wks/yr 50; hrs/yr (power plants only) _____; if seasonal, describe _____

The undersigned owner or authorized representative*** of CENTRAL FLORIDA HOT-MIX, INC. is fully aware that the statements made in this application for a renewal of a permit to operate an air pollution source are true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to maintain and operate the pollution source and pollution control facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules and regulations of the Department. He also understands that a permit, if granted by the Department, will be non-transferable and he will promptly notify the Department upon sale or legal transfer of the permitted facility.

*During actual time of operation.
**Units: Natural Gas-MMCF/hr; Fuel Oils-barrels/hr; Coal-lbs/hr.
***Attach letter of authorization if not previously submitted

Jan Peavy
Signature, Owner or Authorized Representative (Notarization is mandatory)

J. W. PEAVY, PRESIDENT
Typed Name and Title

P.O. BOX 1823
Address

EATON PARK, FLORIDA 33840
City State Zip

6/13/90
Date

813/665-2182
Telephone No.

DER Form 17-1.202(4)
Effective November 30, 1982

John W. Bottorf P.E. 6-21-90
SIGNATURE - JOHN W. BOTTORF, P.E.

FLORIDA REGISTRATION NO. 13089

BOTTORF & ASSOCIATES, INC.
4595 Parkbreeze Ct.
Orlando, Florida 32808-1043

TELEPHONE NO. 407/298-0846

Jeanette L. Kilcrease
Notary Public, State of Florida at Large
My Commission Expires December 28, 19
Bonded thru Agent's Notary Brokerage

Project No. 645

Central Florida Hot-Mix, Inc.
A053-107391

Addendum to Application for Renewal to Operate Air Pollution Sources.

Item 2. Added conveyor and recycle hopper to run recycle. In late May or early June of 1989, an additional duct was installed between the baghouse and the batching tower to control fugitive emissions.

Item 5. On June 6, 1989, this source failed to meet the particulate emission standard. This failure was due to holes inadvertently cut into baghouse bags by a welding torch when the duct described in Item 2. (above) was installed. On June 21,1989, this source was retested and demonstrated compliance with the standards.

BOTTORF Associates inc.
CONSULTING ENGINEERS
4595 PARKBREEZE CT. • ORLANDO, FLORIDA 32808-1057 • (407) 298-0846

August 3, 1990

Project No. 645-4

D. E. R.

AUG 0 6 1990

SOUTHWEST DISTRICT
TAMPA

Gary A. Maier
Air Permitting
Southwest District
Florida Dept. of Environmental Reg.
4520 Oak Fair Blvd.
Tampa, Florida 33610-9544

Subject: Polk County - AP
Central Florida Hot Mix
Renewal of Permit #A053-107391
DER File #A053-182674
75 TPH Asphalt Batch Plant
with Baghouse

Dear Mr. Maier,

We are in receipt of your July 24, 1990 letter requesting additional information to complete the referenced application.

Attached find one (1) original and three (3) copies of the amended application to reflect no increase in operating time. This application is for 8 hours per day, 5 days per week, 50 weeks per year, (2000 hours per year.)

We trust this completes the referenced application. If you have any questions. please call Roger Caldwell at 407/298-0846.

Very truly yours,

John W. Bottorf, Jr., P.E.

JWB/ms

Cy: Mr. J. W. Peavy

Florida Department of Environmental Regulation

Southwest District • 3804 Coconut Palm • Tampa, Florida 33619

Lawton Chiles, Governor 813-744-6100 Carol M. Browner, Secretary

NOTICE OF PERMIT ISSUANCE

In the matter of an
Application for Permit by:

DER File No. AC53-226426
Polk County

Mr. Joe A. Lanier
Secretary/Treasurer
Central Florida Hot Mix, Inc.
P.O. Box 1823
Eaton Park, FL 33840

_____/

Enclosed is Permit Number AC53-226426 for the construction of an asphalt concrete batch plant designated as Asphalt Plant No. 2, issued pursuant to Section 403.087, Florida Statutes.

Any party to this Order (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 32399-2400; 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 Notice is filed with the Clerk of the Department.

Executed in Tampa, Florida.

Sincerely,

J. Harry Kerns

J. Harry Kerns, P.E.
District Air Engineer

cc: John W. Bottorf, Jr., P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on APR 13 1993 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Marilyn Quispe APR 13 1993
(Clerk) (Date)

Florida Department of Environmental Regulation

Southwest District • 3804 Coconut Palm • Tampa, Florida 33619

Lawton Chiles, Governor 813-744-6100 Carol M. Browner, Secretary

PERMITTEE:
Central Florida Hot Mix, Inc.
P.O. Box 1823
Eaton Park, FL 33840

PERMIT/CERTIFICATION
Permit No.: AC53-226426
County: Polk
Expiration Date: 07/24/94
Project: Asphalt Concrete
Batch Plant No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-200 through 17-297 & 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 a Cedarapids Model #10028 rotary drum asphalt batch plant designated as Asphalt Plant No. 2 and designed to produce a maximum of 186 TPH of hot mix asphalt concrete. The rotary dryer is fired with new No. 5 fuel oil or on-specification used No. 5 fuel oil* at a maximum heat input rate of 72.5 MMBTU/hr. The new and used on-specification No. 5 fuel oil shall both have a maximum sulfur content of 0.6% by weight. Emissions from the rotary dryer, elevator, and weigh hopper are controlled by an Herman Grant Manufacturing Co. Serial #5842 cyclone which vents to a Flex-Kleen Model #84UDSM704XLA baghouse and exhausts at a design rate of 45,000 ACFM (26,772 dscfm). The plant is powered by a Caterpillar Model SRCR generator fired by new No. 2 fuel oil or new diesel fuel oil with a maximum sulfur content of 0.5% by weight at a maximum design usage rate of 40 gals./hr.

* The on-specification used No. 5 fuel oil is a blend of new No. 6 fuel oil and used motor oil.

Location: 3350 Reynolds Road, Eaton Park

UTM: 17-412.5E 3097.7N NEDS No.: 0151 Point ID: 02

Replaces Permit No.: N/A

PERMITTEE:
Central Florida Hot Mix, Inc.

PERMIT No.: AC53-226426
PROJECT: Asphalt Concrete Batch Plant No. 2

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.

2. All applicable rules of the Department and design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 17-4.070(7), F.A.C.]

3. The plant is subject to 40 CFR 60.90, Subpart I-Standards of Performance for Hot Mix Asphalt Facilities, which was adopted by reference in Rule 17-296.800, F.A.C. Therefore, emissions from the plant shall not exceed the following:

A. Particulates: 0.04 gr/dscf, 9.18 lbs./hr., and 9.18 TPY

B. Visible emissions: 20% opacity

4. Visible emissions from the generator shall not be equal to or greater than 20% opacity in accordance with Rule 17-296.310, F.A.C.

5. The plant shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320, F.A.C.]

6. Pursuant to Rule 17-4.070(3), F.A.C. and the construction application dated February 15, 1993, the following limitations apply:

A. The maximum design production rate of the plant is 186 tons/hr. of hot mix asphalt concrete.

B. The rotary dryer shall be fired with new No. 5 fuel oil or on-specification used No. 5 fuel oil at a maximum heat input rate of 72.5 MMBTU/hr.

C. Both fuel oils for the rotary dryer shall each have a maximum sulfur content of 0.6% by weight. The total fuel oil usage shall not exceed 1,000,000 gal./yr. 24. TPY SO_2

D. The generator shall by fired with new No. 2 fuel oil or new diesel fuel oil with a maximum sulfur content of 0.5% by weight at a maximum usage rate of 40 gals./hr. (80,000 gals./yr.).

E. For each delivery of on-specification used No. 5 fuel oil, the vendor shall provide an analysis documenting the fuel oil meets the following requirements of 40 CFR 266.40:

Constituent	Allowable Level (max. ppm)	
Arsenic	5	0.002
Cadmium	2	0.0006
Chromium	10	0.04
Lead	400	1.6
Total Halogens	1000/4000	4/16

Copies of the analysis shall be maintained at the facility for a minimum of 2 years and made available to the Department upon request.

F. In order to document continuing compliance with the sulfur content limitations, in % by weight, of the fuel oil used in the rotary dryer and generator, the permittee shall keep records on either vendor provided as-shipped analysis or on analysis of as-received samples taken at the plant. The above records shall be maintained at the facility for a minimum of 2 years and made available to the Department upon request.

G. Continuously monitor the pressure drop across the baghouse.

H. Daily record the pressure drop across the baghouse.

I. Daily record the operating hours along with at the end of each month provide a 12 consecutive month total to ensure the maximum allowable operating time of 2000 hrs./yr. is not exceeded.

J. Daily record the type and quantity of each fuel burned in the rotary dryer so the maximum heat input rate can be determined.

K. At the end of each month record a 12 consecutive month fuel oil usage total to ensure the 1,000,000 gals./yr. limitation for the rotary dryer and 80,000 gals./yr. limitation for the generator is not exceeded.

7. The permittee shall provide written notification to this office as follows:

A. The date construction is commenced postmarked no later than 30 days after such date pursuant to 40 CFR 60.7(a)(1).

B. The anticipated date of startup postmarked not more than 60 days nor less than 30 days prior to such date pursuant to 40 CFR 60.7(a)(2).

C. The actual date of initial startup of an affected facility postmarked within 15 days after such date pursuant to 40 CFR 60.7(a)(3).

D. The anticipated date of compliance testing postmarked not less than 30 days prior to such date pursuant to 40 CFR 60.7(a)(6).

8. Pursuant to 40 CFR 60.8(a) and Rule 17-297.340(1)(a), F.A.C., within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, the rotary dryer shall be tested for particulates and visible emissions. The generator shall be tested for visible emissions the same day the rotary dryer is tested. Submit the test reports to this office in conjunction with a Certificate of Completion of Construction DER Form 17-1.202(3) within the same period stated or within 45 days of testing, whichever occurs first. [Rule 17-297.570(2), F.A.C.]

9. Compliance with emission limitations of Specific Condition Nos. 3 and 4 shall be determined using EPA Methods 1,2,3,4,5, and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297 F.A.C.

10. For purposes of demonstrating initial compliance with Specific Condition No. 3 the opacity observations shall be at least 3 hours and conducted concurrently with the particulate compliance test. The minimum requirements for stationary point source emission test procedures and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60, Appendix A.

11. Testing of emissions must be conducted within 90 - 100% of the maximum permitted hot mix asphalt concrete production rate of 186 tons/hr. and the maximum permitted fuel oil usage rate of 40 gals./hr. for the generator. Failure to submit the production rate, fuel oil usage rate to the generator, pressure drop across the baghouse, heat input rate to the rotary dryer, a copy of the daily operating records, and a copy of the most recent fuel oil analysis for each fuel oil burned during the test may invalidate the test. [Rule 17-4.070(3), F.A.C.]

12. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provisions in Rule 17-296.310, F.A.C. These provisions are applicable to any source, including but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precaution to be taken include the following:

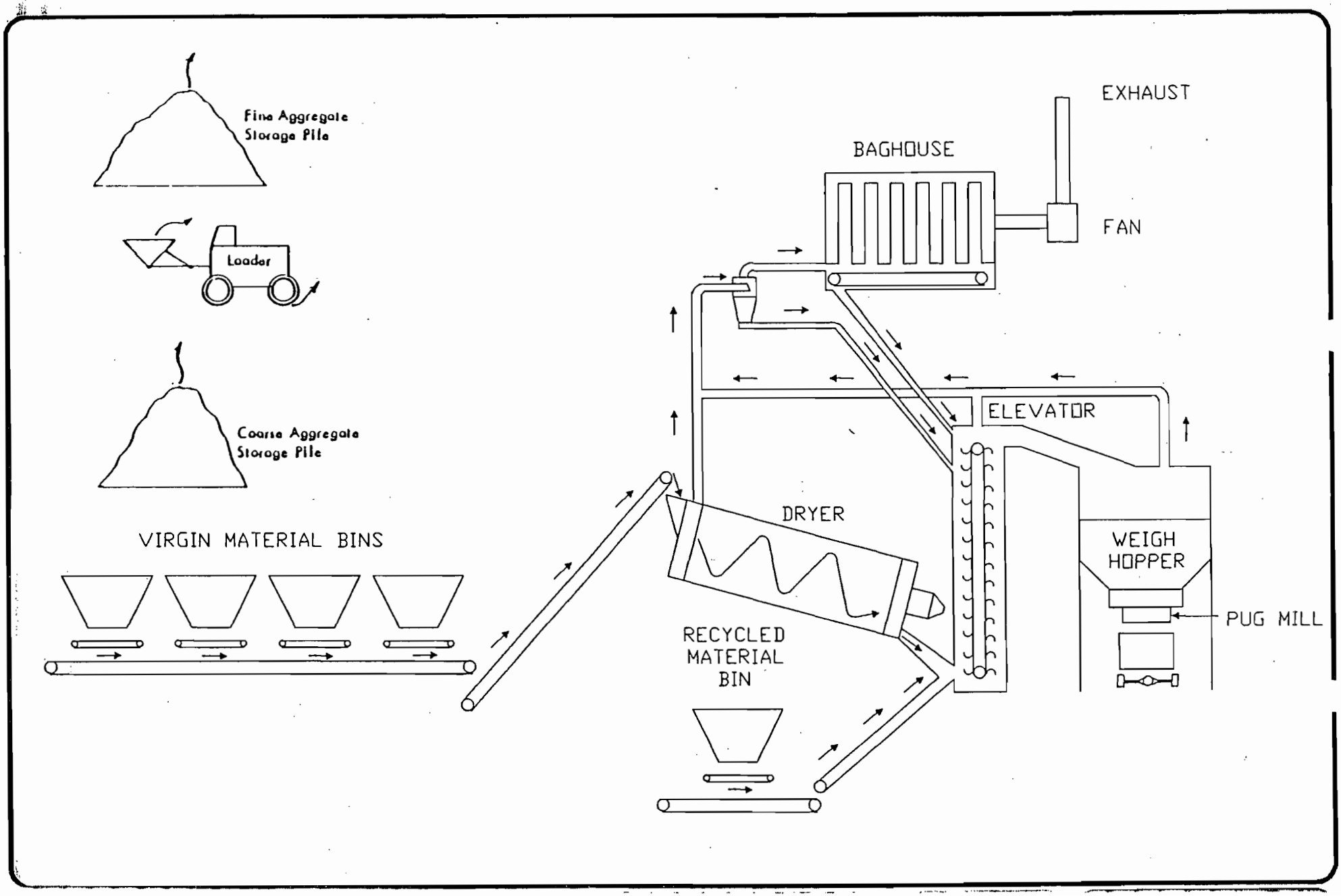
A. Watering of unpaved areas when necessary.

B. Watering of the storage piles as necessary.

13. Four applications for an operating permit shall be submitted to this office at least 60 days prior to the expiration date of this permit. [Rule 17-4.070(3), F.A.C.]

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

For Richard D. Garrity, Ph.D.
Director of District Management


Fine Aggregate Storage Pile
Loader
Coarse Aggregate Storage Pile
VIRGIN MATERIAL BINS
EXHAUST
BAGHOUSE
FAN
ELEVATOR
DRYER
WEIGH HOPPER
PUG MILL
RECYCLED MATERIAL BIN

0151 02

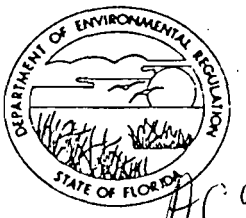
D.E.R.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

FEB 19 1993

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

SOUTHWEST DISTRICT TAMPA

AC 53-226426

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Asphalt Batch Plant [X] New[1] [ ] Existing[1]

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

COMPANY NAME: Central Florida Hot Mix, Inc. COUNTY: Polk

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) Asphalt Plant #2 w/Baghouse.

SOURCE LOCATION: Street 3350 Reynolds Rd. City Eaton Park

UTM: East 17-412.5 KM North 3097.7 KM

Latitude 28 ° 00 ' 12 "N Longitude 81 ° 53 ' 25 "W

APPLICANT NAME AND TITLE: Joe A. Lanier, Secretary/Treasurer

APPLICANT ADDRESS: P.O. Box 1823, Eaton Park, Florida 33840

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Central Florida Hot Mix, Inc.

I certify that the statements made in this application for a 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: Joe A. Lanier

Joe A. Lanier, Secretary/Treasurer
Name and Title (Please Type)

Date: 2-15-93 Telephone No. 813/665-2182

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.

Signed John W. Bottorf, Jr.

John W. Bottorf, Jr., P.E.
Name (Please Type)

Bottorf & Associates, Inc.
Company Name (Please Type)

6729 Edgewater Commerce Parkway, Orlando, FL 32810-4278
Mailing Address (Please Type)

Florida Registration No. 13089 Date: 2-17-93 Telephone No. 407/298-0846

SECTION II: GENERAL PROJECT INFORMATION

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

This project is for the construction of Asphalt Batch Plant, manufactured by Cedar-rapids Model #10028. Particulate emissions will be controlled with a primary cyclone having an 85% particulate removal efficiency, followed by a "Flex-Kleen" Baghouse, Model #84UDSFM704XLA, having a particulate removal efficiency of 99.9% with reverse pulse type cleaning. This project should result in full compliance.

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

Start of Construction 3-15-93 Completion of Construction 3-15-94

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.)

Baghouse & Cyclone $20,000

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

None

2000 hrs/yr

E. Requested permitted equipment operating time: hrs/day 8 ; days/wk 5 ; wks/yr 50 ;

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? NO

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

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

   c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. NO

3. Does the State "Prevention of Significant Deterioriation" (PSD) 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? YES

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? NO

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 justification for any answer of "No" that might be considered questionable.

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Limerock & Sand	Particulate	0.00312	294,066	Virgin Material Bin
Asphalt (AC20)	None	N/A	22,134	Added at Pug Mill
Recycle Asphalt	Particulate	Nil	55,800	Recycle Material Bin
			372,000	

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

1. Total Process Input Rate (lbs/hr): 372,000

2. Product Weight (lbs/hr): 372,000 (186 TPH)

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[2] 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	
Particulate	9.18	9.18	NSPS	0.04 GDSCF 20% Opacity	1.8E+7	9180	Exhaust Stack
SO2	47.1	47.1	No Rule	N/A	94,200	47.1	"
CO	2.5	2.5	" "	N/A	5,000	2.5	"
NOX	27.5	27.5	" "	N/A	55,000	27.5	"
VOC	0.14	0.14	" "	N/A	280	0.14	"
Lead	0.002	0.002	" "	N/A	4,000	2.0	"

[1] See Section V, Item 2.

[2] Reference 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)

[3] Calculated from operating rate and applicable standard.

[4] Emission, 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)
Cyclone (Herman Grant	Particulate	85%	2.5 and Larger	AP40
Mfg. Co., Serial #5842)				
Baghouse (Flex-Kleen	Particulate	99.9%	1.0 and Larger	AP40
Model #84UDSM704XLA)				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
* #5 On-Spec Used Oil	450	500	72.5
or virgin/wer No. 5			

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

Fuel Analysis:

Percent Sulfur: 0.6 Percent Ash: 0.6

Density: 7.43 lbs/gal Typical Percent Nitrogen: Nil

Heat Capacity: 19,515 BTU/lb 145,000 BTU/gal

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

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.

There will be no liquid waste generated with asphalt productions. Used bags from the baghouse will be the only solid waste generated and they will be disposed of at the county landfill.

* This is a blend of virgin #6 oil and used motor oil. (See fuel oil analysis enclosed)

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

Stack Height: 25 ft. Stack Diameter: 2.667' X 2.833' ft.

Gas Flow Rate: 45,000 ACFM 26,772 DSCFM Gas Exit Temperature: 250 °F.

Water Vapor Content: 20 % Velocity: 99.26 FPS

Bag Material: Felted Nomex Cloth Area: 7040 Sq.Ft. Air to Cloth Ratio: 6.4:1

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							
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 Diamter: _____ 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.

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:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

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:

[1]Explain method of determining efficiency.
[2]Energy 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:

[1]Explain method of determining efficiency.
[2]Energy 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:

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

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____no. sites _____ TSP _____( ) SO^2* _____ Wind sp

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

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (8) 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.

CENTRAL FLORIDA HOT MIX, INC.

EMISSION RATE CALCULATIONS

Based on the following:

1. Particulate emissions are based on the NSPS limit of 0.04 GDSCF and an estimated standard exhaust volume of 26,772 DSCFM.
2. 500 Gal/Hr. No. 5 Oil, Max. with 0.6% Sulfur Max.
3. 2000 Hrs/Yr. of operation.
4. AP42, Table 1.3-1 for Fuel related emissions.

No.2 / Diesel Generator — 40 gals/hr — Facility

Particulate = (0.04 GDSCF)(26,772 DSCFM)(60 Min/Hr.) $\left(\frac{1 \text{ Lb.}}{7000 \text{ Grains}}\right)$ = 9.18 Lbs/Hr. — 0.08 lbs/hr — 9.26

(9.18 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 9.18 Tons/Yr. — 0.09 TPY — 9.26

SO2 = (157)(.6) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 47.1 Lbs/Hr. — 2.84 — 49.94

(47.1 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 47.1 Tons/Yr. — 2.84 — 49.94

CO = (5 Lbs/1000 Gal) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 2.5 Lbs/Hr. — 0.2 — 2.7

(2.5 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 2.5 Tons/Yr. — 0.2 — 2.7

NOX = (55 Lbs/1000 Gal.) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 27.5 Lbs/Hr. — 0.8 — 28.3

(27.5 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 27.5 Tons/Yr. — 0.8 — 28.3

Non Methane

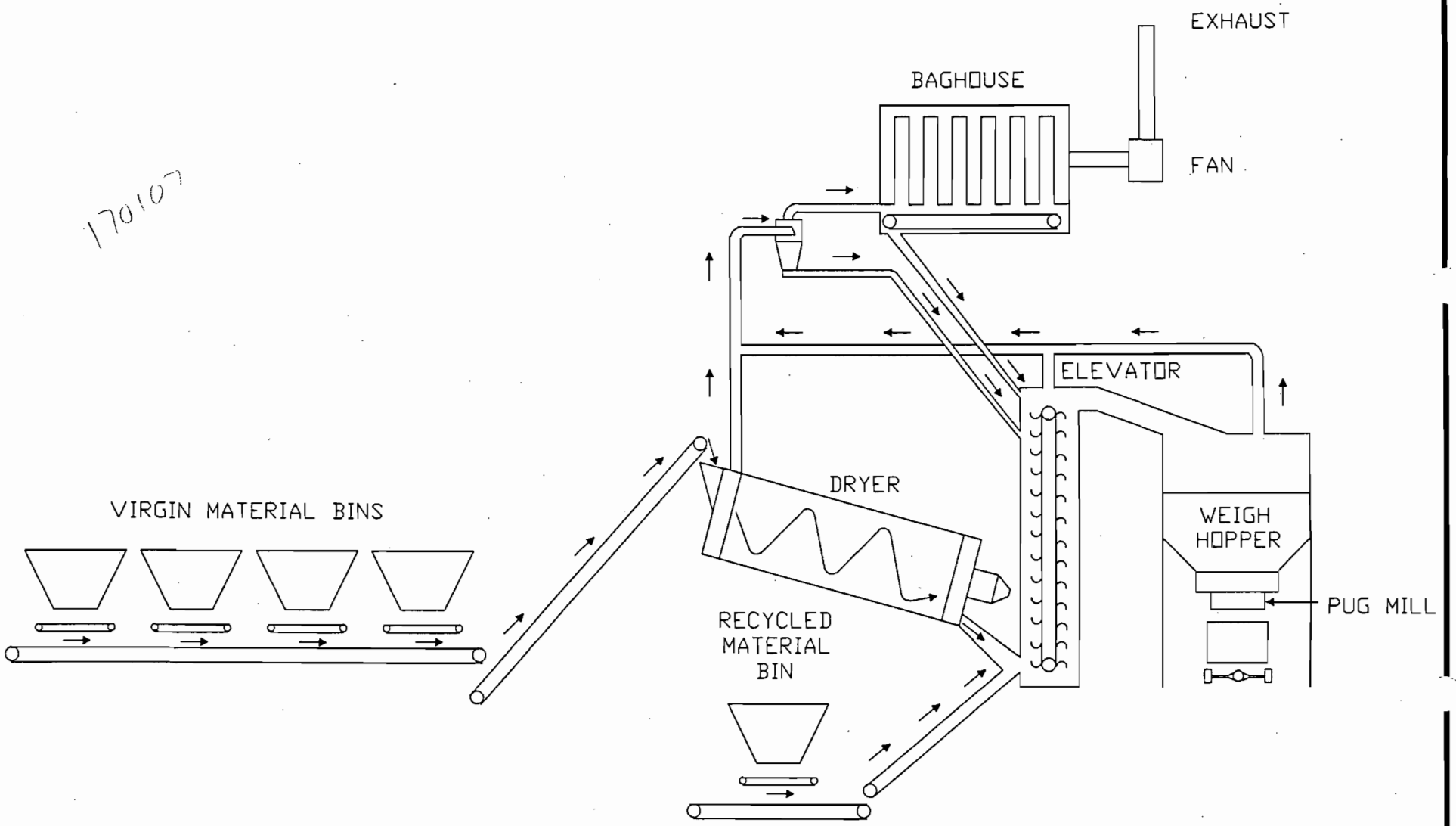
VOC = (0.28 Lbs/1000 Gal.) $\left(\frac{500 \text{ Gal/Hr.}}{1000}\right)$ = 0.14 Lbs/Hr.

(0.14 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 0.14 Tons/Yr.

Lead = $\frac{600 \text{ PPM}}{1{,}000{,}000}$ (500 GPH)(7.43 Lbs/Gal)(1-.999) = 0.0022 Lbs/Hr.

(0.0022 Lbs/Hr.) $\left(\frac{2000 \text{ Hrs/Yr.}}{2000 \text{ Lbs/Ton}}\right)$ = 0.0022 Tons/Yr.

Methane $\frac{1.0}{0.28} \approx \frac{x}{0.14} \Rightarrow$ 0.5 lbs/hr + 0.00232 = 0.5 ; 0.5 TPY + 0.00232 = 0.5 — THC



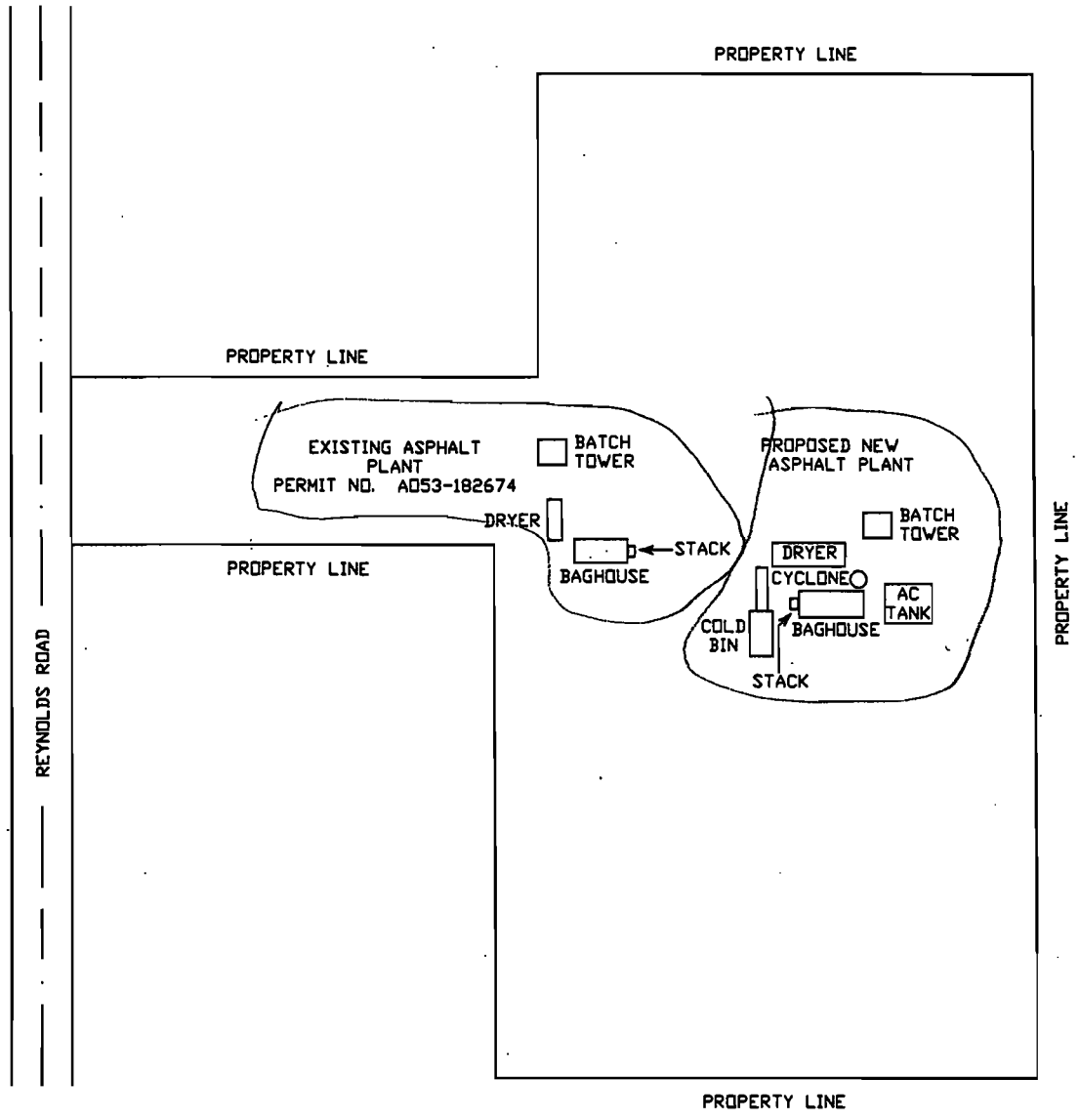
170107

BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS–ANALYTICAL LABORATORY
6729 EDGEWATER COMMERCE PARKWAY ORLANDO FLORIDA 32810-4279
PHONE: (407) 298-0846

CENTRAL FLORIDA HOT MIX, INC.
EATON PARK, POLK COUNTY, FLORIDA

DATE:	REVISION:

DRAWN BY:	KDB	DATE: 2/8/93	645-4
REVIEWED BY:	RTC	VERSION: 10/366	
SCALE:	NO SCALE	FILENAME: FLOW645	PROJECT NO.

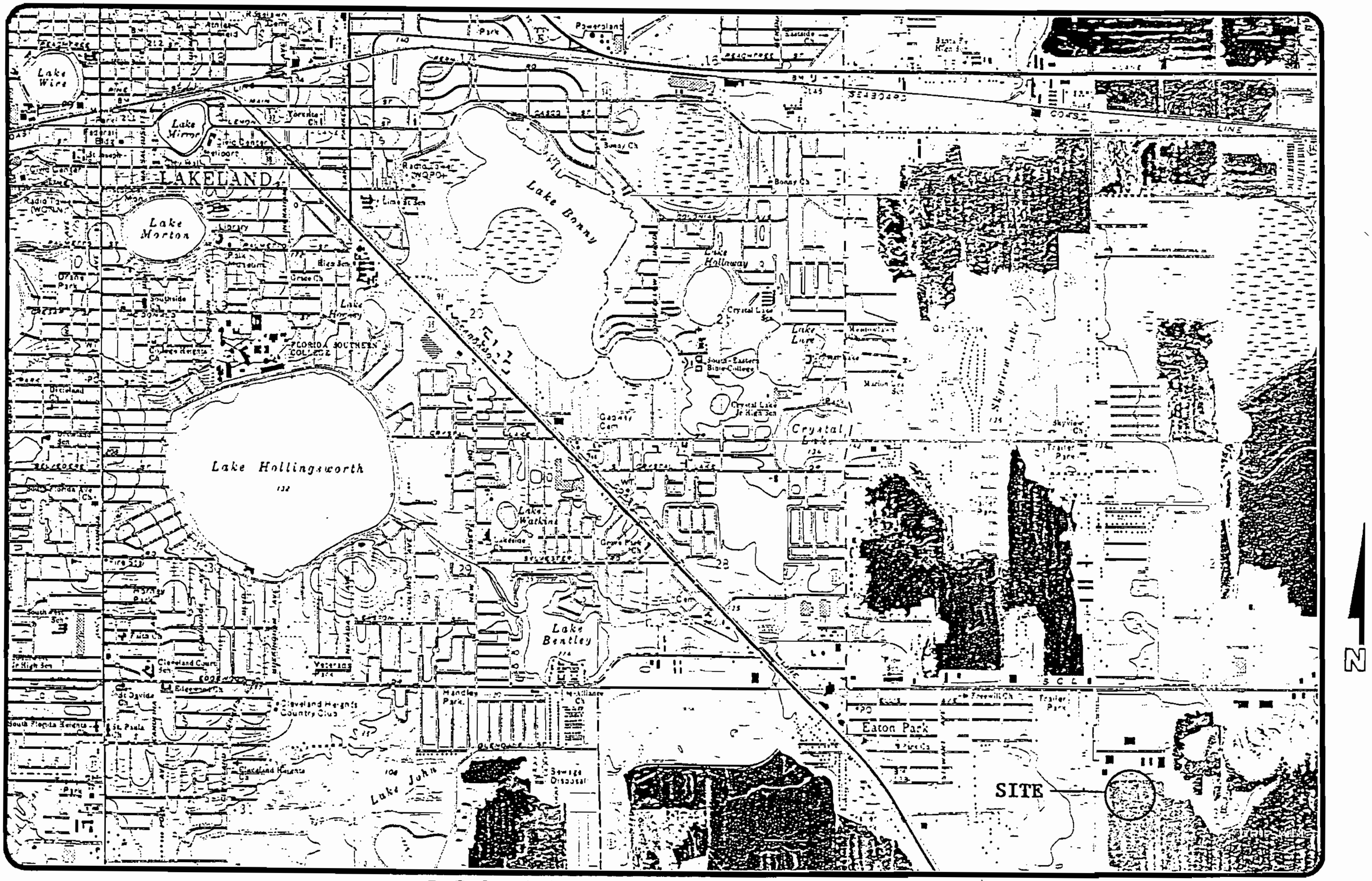


BOTTORF ASSOCIATES INC.
CONSULTING ENGINEERS—ANALYTICAL LABORATORY
6729 EXECUTIVE COMMERCE PARKWAY ORLANDO, FLORIDA 32810-4279
PHONE: (407) 298-0646

CENTRAL FLORIDA HOT MIX, INC.
EATON PARK, POLK COUNTY, FLORIDA

DATE:	REVISION:

DRAWN BY:	KDB	DATE: 2/8/93	645-4
REVIEWED BY:	BTC	VERSION: 10/386	
SCALE:	NO SCALE	FILENAME: SITE645	PROJECT NO.



LOCATION MAP

BOTTORF Associates Inc.
CONSULTING ENGINEERS—ANALYTICAL LABORATORY
PHONE: (407) 290-7846

CENTRAL FLORIDA HOT MIX, INC.

EATON PARK, POLK COUNTY, FLORIDA

DATE:	REVISION:

DRAWN BY: USGS	DATE:	645
REVIEWED BY: RTC	VERSION: 10/386	
SCALE: 1:24,000	FILENAME: MAPBRDR	PROJECT NO.

INTERNATIONAL PETROLEUM CORPORATION

TYPICAL

SPECIFICATIONS FOR RE-REFINED

#5 FUEL OIL

API GRAVITY 60°F	26 - 28	
VISCOSITY SSU @ 100°F	250	
SULPHUR	.4 ÷ .6 %	
POUR	0° F	
FLASHPOINT	150° F MIN.	
WATER BY DISTILATION	TRACE	
SEDIMENT BY EXTRACTION	1% MAX	
TOTAL BOTTOM SEDIMENT AND WATER NOT TO EXCEED	1% MAX	
TOTAL HALOGENS (TOX) ORGANIC AND INORGANIC	600 PPM	1000/4000
LEAD	90 PPM	100
ARSENIC	2.5 PPM	5
CADIUM	1.0 PPM	2
CHROMIUM	5.0 PPM	10
PCB'S	BDL	

ALL PRODUCTS MEET STATE AND FEDERAL STANDARDS FOR ON SPECIFICATION FUEL.

BTUs/gal 145,000

105 South Alexander Street, Plant City, Florida 33566

CAPACITY OF DRIER

NOMINAL RATED CAPACITY OF CEDARAPIDS DRIERS

Based on conditions as specified*
Tons Per Hour of Dried Aggregate

DRIER MODEL		3612-P	4820-P	6422-P		7224-B	8026	8828-B		10028	10032	11032		
EXHAUST SYSTEM CFM		5,000	10,000	18,000	21,000	23,000	28,000	35,000	40,000	45,000	50,000	55,000	60,000	66,000
PERCENT OF FREE MOISTURE (SURFACE COATING) IN COMBINED AGGREGATE FEED	3%	44	87	157	183	200	240	305	347	392	436	480	523	576
	4%	36	72	129	151	165	200	250	287	323	359	395	431	474
	†5%	30	60	110	130	140	170	215	245	275	305	335	365	405
	6%	26	53	95	111	122	148	186	212	239	265	292	318	350
	7%	23	47	84	98	107	130	163	186	210	233	256	280	308
	8%	21	41	74	87	95	116	145	166	186	207	228	248	273
	9%	19	37	67	78	86	104	130	149	168	186	205	224	246
	10%	18	34	61	71	79	94	118	136	153	170	190	203	225
	11%	15	31	56	65	71	86	108	124	139	155	170	186	204
	12%	14	28	51	59	65	79	89	113	127	142	156	170	187
CONSUMPTION** BURNER FUEL		GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH	GPH
	NOMINAL	55	110	195	225	245	300	375	435	485	540	590	645	710
	MAXIMUM	65	125	225	265	290	350	440	500	565	630	690	750	830

†PUBLISHED RATINGS BASED ON REMOVAL OF 5% FREE MOISTURE

*Drier Rating Conditions
a. Aggregate discharge temp. 300° F.
b. Exhaust Gas Exit Temp. 300° F.
c. Std. Atmospheric Pressure 760mm HG.
d. 25% Excess Combustion Air
e. 10% of Exhaust System CFM use by plant fugitive dust system
f. Specific heat of aggregate — 0.22 BTU per lb. per degree F.
g. Aggregate gradation per AASHO Guide Spec. 703.09 Grading A, B or C
h. Ratings reduce 3% per 1,000 ft. above 1,000 ft. elevation
j. Drier slope adjusted to maintain drum loading
k. Capacity at moisture contents not shown subject to additional factors.

**Burner Fuel Consumption figures shown above are estimates for heavy oil. (150,000 B.T.U. per gal.) Nominal valves are for 5% free moisture removal. Maximum values are for severest listed condition.
For other fuels, multiply GPH of heavy oil by factor given below for each fuel to obtain its estimated consumption rate.

Fuel	Chart GPH	Factor	Rate
Light Oil (140,000 BTU/Gal.)	.....	x 1.07 = ...	GPH
Propane — Liquid (91,800 BTU/Gal.)	.....	x 1.63 = ...	GPH
Propane — Vaporized (2,500 BTU/Cu. Ft.)	.....	x 60 = ...	GPH
Butane — Liquid (102,400 BTU/Gal.)	.....	x 1.46 = ...	GPH
Butane — Vaporized (3,200 BTU/Cu. Ft.)	.....	x 47 = ...	GPH
Natural Gas (1,000 BTU/Cu. Ft.)	.....	x 150 = ...	SCFH

The capacity is rated in output tons per hour based on removal of 5% free moisture at 300° F. exhaust and rock discharge temperature. Capacity will vary depending upon type and size of aggregate and amount of internal and external moisture to be evaporated. Capacities will also be **reduced** approximately 3% for each 1000 ft. above sea level. The above chart gives the capacity of drier for various percentage of moisture in the cold feed aggregates.

Internal moisture in the aggregates is considerably more difficult to remove than external moisture and will usually reduce drier capacity below the free (external) moisture ratings given.

NOTE — Reducing the tonnage of material to the drier has no appreciable effect on removing the internal moisture when the drier is being operated within its rated capacity.

The following formula should be used to determine the percentage of moisture in cold feed material fed to the drier. It is important to draw truly representative samples which accurately reflect the portion of the stockpile that is being dried.

FORMULA:

$$\frac{\text{Wet Weight} - \text{Dry Weight}}{\text{Wet Weight}} = \%\ \text{of Moisture}$$

EXAMPLE:

$$\frac{100\ \text{Lbs.} - 92\ \text{lbs.}}{100\ \text{Lbs.}} = .08\ (8\%)$$

ASTEC a Division of Astec Industries, Inc.

October 28, 1992

Mr. J.W. Peavy
Central Florida Hot Mix Inc.
P.O. Box 1823
Eaton Park, Florida 33840

RE: Contract No. 780-92

Dear Mr. Peavy:

This letter is to confirm the recent purchase of the following used equipment:

ONE (1) USED CEDARAPIDS 6,000# BATCH PLANT:

Cold Feed System:	four (4) bin (A.E. Finley) cold feed system with 30" belt feeders, 36" collecting conveyor, and 24 x 60' charging conveyor.
Dryer Drum Unit:	88" x 26' Cedarapids portable dryer with belly chain drive. Genco FP-103 automatic burner, on heavy oil.
Dust Collector:	Primary cyclone with Flexoclean Portable Baghouse. Pluse-Jet type cleaning with dust screw augers (3) in the bottom feeding a cross screw feeding back to the hot elevator. 150 hp exhaust fan and aircompressor mounted on the portable frame.
Hot Elevator:	Incline enclosed bucket elevator.
Screen Section:	CR 48" x 9'9" Multi-Deck Cedarapids screen system.
Hot Bin Section:	Est 35 Ton capacity of all (4) four hot bins. Portable unit.
Pugmill Section:	6,000# Twin shaft Cedarapids mixer. Portable unit.
Control System:	Electric over air.
Automation:	Computer automation system with manual back-up system. All mounted in a fixed control house.
Electrical:	All starters and breakers included. Wiring is portable rubber cable quick disconnect.

PO BOX 72787 • 4101 JEROME AVENUE • CHATTANOOGA, TN 37407 • TELEPHONE 615-867-4210

Flex-Kleen
Research-Cottrell
165 N. Canal St.
Chicago, Illinois 60606
(312) 648-5300/Telex No. 254254

SPARE PARTS LIST

For One Unit Only

BOTTOM BAG REMOVAL -

DATE : 12/24/92

FOR : Central Florida Hot Mix Inc

YOUR P.O. NO. :

FLEX-KLEEN MODEL NO. 84UDSM704XLA

OUR JOB NO. 3420

	QUANTITY	ITEM	NUMBER	
1 Bags		12 oz. Polyester		
		16 oz. Polyester		
		16 oz. Polyester - SS Ground Wire		
	704	86" 14 oz. Nomex	B12110	
		12 oz. Polypropylene		
		16 oz. Polypropylene		
2 Bag Cages	32	84" Mild Steel	C10111	
		Mild Steel Epoxy Coated		
		304L Stainless Steel		
		316L Stainless Steel		
3 Bag Clamps	30	Bag Clamp, Hex Head, SS	M12108	
		Bag Clamp, Quick Release, SS	M12803	
4 Timer	1	Solid State Timer (Without Enclosure)	T16054	
5 Gauges	1	Differential Pressure Gauge 0-15' W.G.	E21401	
6 Diaphragm Valves	5	Diaphragm Valve - 3/4"	M14909	
	5	Replacement Diaphragm Kit for M14909	K10102	
		Diaphragm Valve - 1"	M28118	
		Replacement diaphragm Kit for M28118	K17427	
7 Solenoid Valves		Solenoid Pilot Valve	E24104	
	5	Solenoid Valve	Y19116	

See reverse side for identification of above spare parts. FORM 4