KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-00-03

February 26, 2001

RECEIVED
FEB 2 6 2001
Bureau of Air Monitoring
& Mobile Sources

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Subject: Additional Information
Louis Dreyfus Citrus, Inc.
Permit No. 0950053-005-AC

Dear Mr. Kahn:

This is a follow up to our telephone conversation last week regarding the pending permit revision request for the above referenced facility.

As discussed, Louis Dreyfus Citrus, Inc. will accept the following permit limitation for the peel dryers No. 6 and 7, in order to keep the VOC emissions within the previously established annual emissions cap:

1. Annual combined peel processing rate of Dryers No. 6 and 7 shall not exceed 50,000 tons of bone dry peel per year, based on a 12 month rolling average. Compliance with the peel processing limit will be demonstrated by maintaining the existing log of the weight of pellets produced and their moisture content and calculating the effective bone dry weight of the processed peel. A daily log entry will be used to calculate a calendar month total and an eventual 12-month rolling average.

2. Annual combined VOC emissions from Dryers No. 6 and 7 shall not exceed 455 tpy, based on a 12 month rolling average. Compliance with the emission limit will be demonstrated by multiplying the effective bone dry weight of the processed peel from (1) above with the emission factors in pounds VOC/ton bdp from the most recent compliance test on each dryer. A daily log entry will be used to calculate a calendar month total and an eventual 12-month rolling average.

3. The maximum allowable VOC emission rate for each dryer shall not exceed 250 pounds per hour, based on 18.2 pounds VOC per ton of bone dry peel. Compliance with the VOC emission limitation will be demonstrated with annual stack testing of each dryer using EPA Reference Methods 18 and 25A.

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection

February 26, 2001

The potential annual emissions can be estimated as follows:

VOC = 50,000 tpybdp x 18.2 lbVOC/tbdp x ton/2000 lbs = 455 tpy

This emission level is below the current VOC emission cap for the dryers of 457 tpy.

The allowable annual boxes of fruit processed can be estimated based on an average peel moisture content of 85 percent and average weight of 38 lbs peel/box, as follows:

Boxes = 50,000 tpybdp x 1/(1-0.85) x box/38 lbs peel x 2000 lb/ton = 17.5 MMBoxes/yr

Pursuant to your request, the VOC emission measurements information previously submitted are presented below in terms of pound VOC per ton of bone dry peel processed.

Unit, Run	Peel tph	tph bdp	VOC lb/hr	VOC lb/ton bdp
Dryer 6, Run 1	41.62	12.44	200.60	16.13
Dryer 6, Run 2	42.34	12.66	226.27	17.87
Dryer 6, Run 3	43.69	13.06	190.70	14.60
Dryer 7, Run 1	45.26	13.67	214.60	15.70
Dryer 7, Run 2	41.86	12.64	212.70	16.83
Dryer 7, Run 3	44.70	13.50	214.10	15.86
Maximums	45.26	13.67	226.27	17.87

We really appreciate your assistance as well as Clair Fancy's guidance on this issue.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par

c: P. Ballentine, LDC
Jen Koplow, CD

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT _____

FAX TRANSMITTAL FORM

TO: Joe Kahn FDEP

FAX NO.

FROM: Pradeep Raval

DATE: 2/20/01 SENT BY:

The text being transmitted consist s of 5 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: AC copy LDCurtis.

P.S.

Telecon confirmed for 3:30 pm tomorrow

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

Permittee:
Louis Dreyfus Citrus, Incorporated
Post Office Box 770399
Winter Garden, FL 34777-0399

Atten: Paul Ballentine, Plant Manager

I.D. Number: 0950053
Permit Number: 0950053-005-AC
Expiration Date: September 30, 2004
County: Orange
Latitude/Longitude:
28° 32' 07"N/81° 30' 40"W
UTM: 17-448.8 KmE; 3159.6 KmN
Project: Citrus Processing Plant

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210. 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:

This facility includes citrus peel dryers no. 6 and 7 each equipped with a waste heat evaporator to control particulate emissions; peel cooler west and peel cooler east each equipped with a cyclone to control particulate emissions; and five steam boilers as follows:

- Boiler No. 4 - Titus, 14.34 MMBTU/hr
- Boiler No. 5 - Johnson, 31.35 MMBTU/hr
- Boiler No. 6 - Johnson, Model 538-AHG, 42.0 MMBTU/hr
- Boiler No. 7 - Johnson, Model 53-AHG, 1000 hp
- Boiler No. 8 - 1200 hp

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

This permit replaces the previous construction permit 0950052-004-AC.

This facility is located at 355 South Ninth Street, Winter Garden, Orange County, Florida.

General Conditions are attached to be distributed to the permittee only.

Permittee:
Louis Dreyfus Citrus, Incorporated

Attention: Paul Ballentine, Plant Manager

I.D. Number: 0053
Permit Number: 0950053-005-AC
Expiration Date: Sept. 30, 2004
County: Orange

SPECIFIC CONDITIONS:

OPERATING CONDITIONS

1. Peel Dryers no. 6 and 7 are permitted to operate a combined rate of:

   a. 71,659 tons of bone dry peel per consecutive twelve months;
   b. 480 MMCF of natural gas (or propane) per consecutive twelve months,
   c. 275,600 gallons of residual fuel oil per consecutive twelve months, with a maximum sulfur content of 1.5% by weight; or, an equivalent prorated annual heat input rate for any combination of natural gas and residual fuel oil and,
   d. 1.5 MMBtu heat input per ton wet peel based upon stack test December 10, 1998, Specific Condition 16, and PSD restriction. The heat input can be raised after a successful stack test which meets the requirements of Specific Condition 10.

   [Rule 62-210.200, (PTE), F.A.C.]

2. The East and West Coolers are permitted a maximum combined input rate of:
   a. 71,659 tons per consecutive twelve months of bone dry peel.
   [Rule 62-210.200, (PTE), F.A.C.]

3. Boilers No. 4,5,6,7 and 8 are permitted a maximum combined input of:

   a. 504 MMCF of natural gas (or propane) per consecutive twelve months;
   b. 1,428,000 gallons of distillate fuel oil for only Boiler No. 8 per consecutive twelve months, with a maximum sulfur content of 0.05% by weight; or, an equivalent prorated annual heat input rate for any combinations of natural gas and distillate fuel oil;
   c. 1,347,000 gallons of residual fuel oil for only Boilers No. 4,5,6 and 7 per consecutive twelve months, with a maximum sulfur content of 1.5% by weight; or, an equivalent prorated annual heat input rate for any combination of natural gas and residual fuel oil.

   [Rule 62-210.200, (PTE), F.A.C.]

4. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor.
   [Rule 62-210.296.320(2), (PTE), F.A.C.]

5. Dryers No. 6 and 7, East and West Cooler's are subject to Rule 62-296.320(4) and Process Weight Table 62-296.310-1, F.A.C. However, the applicant has agreed to the more restrictive particulate emissions limit per Specific Condition No. 9.

6. The visible emission limitation for East and West Coolers, and Dryers No. 6 and 7, are set forth in Rule 62.296.320(4)(b)1., F.A.C. (limited to less than 20% opacity).

7. The visible emission limitation for Boilers No. 4,5,6,7 and 8 shall comply with Rule 62-296.406(1), F.A.C., (up to 20% opacity, except for one 2-minute period per hour during which opacity shall not exceed 40%).

8. The visible emission limitation for Boilers No. 4, 5, 6, 7 and 8 shall comply with Rule 62-296.406(1), F.A.C., (up to 20% opacity, except for one 2-minute period per hour during which opacity shall not exceed 40%).

Permittee:
Louis Dreyfus Citrus, Incorporated

Attention: Paul Ballentine, Plant Manager

I.D. Number: 0053
Permit Number: 0950053-005-AC
Expiration Date: Sept. 30, 2004
County: Orange

EMISSION LIMITS

9. The following emissions limitations apply to the emissions units:

Dryer No.6 & No.7	Each Unit Lb/hr	Combined TPY
PM	13.1	35.6
PM_{10}	7.8	21.4
CO	130.7	355
VOCs	175.3	457
NO_x	12.4	33.7
SO2	147.6	33.9

East/West Pellet Cooler(s)	Each Unit Lb/hr	Combined TPY
PM	1.0	2.8
VOCs	13.4	35

Boiler 4,5, 6, 7	Each Unit	Combined TPY
PM/PM_{10}		12.3
SO2		158.8

Boiler 8	Each Unit Lb/hr	Combined TPY
PM/PM_{10}	0.7	1.4
SO2	2.4	5.1

10. BACT Determined by DEP:

The amount of particulate and sulfur dioxide emissions from boilers no. 4, 5, and 6 shall be limited by the firing of natural gas or no. 6 fuel oil with a sulfur content not to exceed 1.5%, by weight. The amount of particulate and sulfur dioxide emissions from boiler no. 7 shall be limited by the firing of natural gas or no. 6 fuel oil with a sulfur content not to exceed 2.2%, by weight. The amount of particulate and sulfur dioxide emissions from boiler no. 8 shall be limited by the firing of natural gas or distillate fuel oil with a sulfur content not to exceed 0.05%, by weight.

Permittee:
Louis Dreyfus Citrus, Incorporated

Attention: Paul Ballentine, Plant Manager

I.D. Number: 0950053
Permit Number: 0950053-005-AC
Expiration Date: Sept. 30, 2004
County: Orange

COMPLIANCE

11. Dryers no. 6,7, and the East and West pellet coolers (1) shall be compliance tested annually in accordance with the following methods:

a)	PM	EPA Method 5
b)	PM10	EPA Method 5 may be used*
c)	CO	EPA Method 10
d)	NO_x	EPA Method 7E
e)	VOC	EPA Method 25A & EPA Method 18**
f)	SO_2	Fuel oil sulfur content***
g)	VE	EPA Method 9

* With all PM assumed to be PM10
** EPA Method 18 may be used to determine methane emissions, which can be subtracted to determine total non-methane VOC emissions.
*** Per ASTM D4057-88 and ASTM D129-91, ASTM D2622-94, or ASTM D4294-90
(1) Testing for CO, NO_x and SO_2 do not apply to pellet coolers.

Compliance with the SO_2 emission limit will be demonstrated by limiting fuel oil consumption and sulfur content of fuel oil in the two dryers combined.

12. The boilers shall be compliance tested annually by a certified observer in accordance with DEP Method 9 within ninety days after startup. The DEP Method 9 test shall consist of a thirty (30) minute visible emission test.

13. Compliance with the SO_2 emission limit for all the boilers shall be demonstrated by maintaining records on site to verify that each shipment of No. 2 fuel oil has 0.05 percent and No. 6 fuel oil has 1.5 percent or less sulfur and that the sulfur content was determined by ASTM method ASTM D4057-88 and ASTM D129-91, ASTM D2622-94 or ASTM D4294-90, adopted and incorporated by reference in Rule 62-297.440(1), F.A.C. To demonstrate compliance with the PM, NO_x, and CO emission limits, the appropriate AP-42 emission factors from Version 5 will be utilized.

14. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the Orange County Environmental Protection Department. The notification must include the following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test [Rule 62-297.310(7)(a)9, F.A.C.].

15. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity [Rule 62-297.310(2), F.A.C.].

Permittee:
Louis Dreyfus Citrus, Incorporated

Attention: Paul Ballentine, Plant Manager

I.D. Number: 0950053
Permit Number: 0950053-005-AC
Expiration Date: Sept. 30, 2004
County: Orange

16. Reports of the required compliance tests shall be filed with the Orange County Environmental Protection Department as soon as practical but no later than 45 days after the last test is completed [Rule 62-297.310(8)(b), F.A.C.].

17. The stack sampling facility must comply with Rule 62-297.310(6), F.A.C., regarding minimum requirements that include but are not limited to: location of sampling ports, work platform area hand rails and toe rails, caged ladder, access and electrical power.

18. The type of fuel and the heat input to the boiler must be entered on the visible emission test report.

19. Pursuant to Rule 62-4.070(3), F.A.C., a monthly log shall be kept for this facility to document compliance with the limitations of specific conditions no. 1,2, and 3. The log shall be completed by the end of the following month and retained on file at the facility for at least five years, as the facility is Title V.

20. A DEP Form No. 62-210.900(5), F.A.C. "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, shall be completed for each calendar year and submitted to the Orange County Environmental Protection Department on or before March 1 of the following year [Rule 62-210.370(3), F.A.C.].

PERMIT APPLICATION

21. A revised Title V operating permit is required for operation of this source. To obtain an operating permit, the permittee must submit an updated Title V permit application, along with the applicable compliance test results to the Department's Central District office [Rule 62-4.220, F.A.C.]. The application shall be submitted no later than 180 days after the source has been placed in operation.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Issued: 3-28-00

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-00-03

February 5, 2001

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection
Mail Station # 5510
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Subject: Additional Extension Request
Louis Dreyfus Citrus, Inc.
Permit No. 0950053-005-AC

Dear Mr. Kahn:

This is a follow up to your telephone conversation with Pradeep Raval regarding the pending permit review for the above referenced facility.

We would like to request a final extension of time, until February 28, 2001, within which to provide you with additional information on the project. The additional time is needed in order to assess and address the provisions of the recently signed agreement between the FDEP staff and representatives of the citrus industry and to review EPA's comments on the subject.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par

C: P. Ballentine, LDC

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-00-03

December 8, 2000

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection
Mail Station # 5510
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Subject: Additional Extension Request
Louis Dreyfus Citrus, Inc.
Permit No. 0950053-005-AC

Dear Mr. Kahn:

This is a follow up to your telephone conversation with Pradeep Raval regarding the pending permit review for the above referenced facility.

We would like to request an additional 60-day extension of time within which to provide you with additional information on the project. The additional time is needed in order to assess and address the provisions of the recently signed agreement between the FDEP staff and representatives of the citrus industry.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par

C: P. Ballentine, LDC

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 118-00-03

FAX TRANSMITTAL FORM

TO: Joe Kahn
FDEP Tallahassee

FAX NO.

FROM: Pradeep Raval

DATE: 12/8/00 SENT BY: PR

The text being transmitted consist s of 1 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: Per our conversation,
Regards, PR

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 118-00-03

December 8, 2000

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection
Mail Station # 5510
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Subject: Additional Extension Request
Louis Dreyfus Citrus, Inc.
Permit No. 0950053-005-AC

Dear Mr. Kahn:

This is a follow up to your telephone conversation with Pradeep Raval regarding the pending permit review for the above referenced facility.

We would like to request an additional 60-day extension of time within which to provide you with additional information on the project. The additional time is needed in order to assess and address the provisions of the recently signed agreement between the FDEP staff and representatives of the citrus industry.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par

C: P. Ballentine, LDC

BEST AVAILABLE COPY

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 118-00-03

FAX TRANSMITTAL FORM

TO: Joe Kahn
FDEP. Tallahassee

FAX NO.

FROM: Pradeep Raval

DATE: 10/16/00 SENT BY: PR

The text being transmitted consist s of 1 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: Per our conversation.
Regards,
PR

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-00-03

October 13, 2000

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Subject: Extension Request
Louis Dreyfus Citrus, Inc.
Permit No. 0950053-005-AC

Dear Mr. Kahn:

This is a follow up to your telephone conversation with Pradeep Raval regarding the pending permit review for the above referenced facility.

We would like to request a 90-day extension of time within which to provide you with additional information on the project.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par
Enc.

c: P. Ballentine, LDC

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 118-00-03

October 13, 2000

Mr. Joseph Kahn, P.E.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Subject: Extension Request
Louis Dreyfus Citrus, Inc.
Permit No. 0950053-005-AC

Dear Mr. Kahn:

This is a follow up to your telephone conversation with Pradeep Raval regarding the pending permit review for the above referenced facility.

We would like to request a 90-day extension of time within which to provide you with additional information on the project.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par
Enc.

c: P. Ballentine, LDC

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

June 27, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John B. Koogler, Ph.D., P.E.
Koogler & Associates
4014 NW Thirteenth Street
Gainesville, Florida 32609

Re: Request for Additional Information
DEP File No. 0950053-007-AC
Louis Dreyfus Citrus, Inc., Requested Modification of Permit No. 0950053-005-AC

Dear Mr. Koogler:

On June 14th, the Department's Central District office received your letter requesting modification of Permit No. 0950053-005-AC to revise the emission limits for dryers 6 and 7 and the production limits for the facility. A copy of your request has been forwarded to this office from the Central District office, and the project has been transferred to this office for review. Your request is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. The proposed project appears to require review pursuant to the Department's rules for Prevention of Significant Deterioration (PSD). Please either structure your request so that the project is not subject to PSD or submit an application for a PSD permit.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call me at 850/921-9519.

Sincerely,

Joseph Kahn, P.E.
New Source Review Section

/jk

cc: Len Kozlov, P.E., DEP CD
Paul Ballentine, Louis Dreyfus Citrus

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

John B. Koogler, Ph.D., P.E.
Koogler and Associates
4014 NW 13th Street
Gainesville, FL 32609

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery: 6-29-00

C. Signature: Wendy Auerbach ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
XX Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
Z 341 355 320

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

Z 341 355 320

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to: John B. Koogler, Ph.D., P.E.	
Street & Number: 4014 NW 13th St.	
Post Office, State, & ZIP Code: Gainesville, FL 32609	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date: 0950053-007-AC Mailed: 6-27-00	

PS Form **3800**, April 1995

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 118-97-02

August 16, 2000

VIA FAX

Mr. Joe Kahn
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Louis Dreyfus Citrus, Inc.
Plant Maintenance and Process Modification
Request for Permit Applicability Determination

Dear Joe:

As Paul Ballentine and I have discussed with you on separate occasions, Louis Dreyfus Citrus, Inc. (Dreyfus) undertook a project to improve combustion control of the natural gas fired burners on their two citrus peel dryers during the summer of 1999 and plans to increase the waste heat evaporation capacity in the feed mill this summer (summer of 2000). Dreyfus requests permitting applicability determinations for the two projects separately.

Citrus Peel Dryer Burner Control Changes

During the summer of 1999, Dreyfus made changes to the burner control systems of the No. 6 and No. 7 peel dryers to improve control of combustion over the entire range of dryer operations. The changes did not increase the fuel firing rate to either dryer or the evaporative capacity or wet peel throughput of either dryer. As stated, the purpose of the changes was to improve control over the performance of the existing burners at all levels of operation.

The changes to the No. 6 and No. 7 dryers included the installation of Allen-Bradley Programmable Logic Control (PLC) systems on each burner and the replacement of the old natural gas regulators on each burner with high efficiency gas regulators. The PLC systems plus the high efficiency gas regulators were

added so that maximum combustion efficiency can be achieved over all firing ranges. As a point of comparison, the old gas regulators with manual controls provided good combustion control at the mid-range firing level only.

In addition to the changes in the burner systems, additional temperature probes were placed in the return gas duct (the duct returning dryer exhaust gas from the suction box at the discharge end of the dryer back to the combustion chamber); the suction box and waste heat evaporator fans were equipped with variable frequency drives; and the combustion air dampers on both dryers were replaced with servo-motor operated dampers. The temperature probes provided signals to the PLC systems and the suction box and waste heat evaporator fans and the combustion air dampers responded to signals from the PLC systems.

The overall purpose of the changes was to place the operation of the burner systems of both dryers, including the associated air flow rates through the dryers, under the control of PLC systems. It was the opinion of Dreyfus that the changes would improve control over the operations of the two peel dryers.

As previously stated, the heat inputs to the dryers did not change nor did the evaporative capacities or peel processing rates change. It is our opinion that the changes described herein are not a modification as defined by Department rule as the changes did not result in an increase in the potential to emit any air pollutant subject to regulation nor will the changes allow an increase in the processing rate of the dryers which, in turn, would have the potential of increasing emissions. As a result, it is our opinion that an air construction permit was not required for these changes. We are requesting a Department determination on this matter.

Feed Mill Waste Heat Evaporation Capacity Increase

The second action that Dreyfus is contemplating is planned for this summer (summer of 2000). This project involves increasing the waste heat evaporation capacity of the No. 7 dryer from the present evaporation rate of 80,000 pounds per hour (evaporative capacity) to 110,000 pounds per hour. This project will result in no changes whatsoever to the No. 7 dryer itself, including the burner system or the peel processing capacity. The project will only take advantage of waste heat from the No. 7 dryer that is presently lost and use this heat to evaporate additional process water; thereby improving the water balance of the plant.

At present time, the No. 7 dryer has an evaporative capacity of 60,000 pounds per hour. This will not change. A dryer of this size is capable of supporting a waste heat evaporator system with an evaporative capacity of 110,000-120,000

pounds per hour. The existing waste heat evaporator that is sized at 80,000 pounds per hour (evaporative capacity) is therefore unable to take advantage of all of the waste heat from the No. 7 dryer. The excess heat is presently lost. The project that Dreyfus is planning will add an additional 30,000 pounds of waste heat evaporation capacity to the No. 7 dryer system. This will be accomplished by utilizing an existing 30,000 pounds per hour waste heat evaporator at the Dreyfus plant that was removed from service in the early 1990's.

The project will take the gases that are presently exhausted from the 80,000 pounds per hour waste heat evaporator and direct them through the 30,000 pounds per hour waste heat evaporator. When exhausted from the 30,000 pounds per hour waste heat evaporator, the gases will be ducted back to the stack through which they are presently discharged. The only change that will occur in the gas stream is that the temperature will be reduced and additional water vapor will be condensed to provide the driving force for the additional 30,000 pounds per hour evaporation capacity.

This additional evaporative capacity will allow Dreyfus to evaporate an additional 3600 gallons per hour of process water thereby improving the water balance of the plant. As stated previously, the project will have no effect whatsoever on the No. 7 dryer. The only change in the gas stream discharged from the dryer and present waste heat evaporator will be a reduction in temperature and moisture content. It is our opinion that this project does not constitute a modification as it will not result in an increase in actual emissions of any regulated air pollutant or result in the potential to increase the fruit processing rate and indirectly result in an increase in emissions. We are requesting a Department determination of this matter also.

I appreciate your consideration of these matters and will provide additional information if it is required. If there are questions, please do not hesitate to contact me at 352-377-5822.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:wa

C: Mr. Rick Tomlin, Dreyfus
Mr. Paul Ballentine, Dreyfus
Mr. Jim Alves, Hopping Green et al

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

August 14, 2000

Mr. John B. Koogler, Ph.D., P.E.
Koogler & Associates
4014 NW 13th Street
Gainesville, Florida 32609

Re: Louis Dreyfus Citrus, Inc,
Peel Dryers Combustion Chamber Lengthening

Dear John:

We have reviewed your letter dated August 3. In this letter you requested confirmation that the following project, described in your letter, does not constitute a modification per Department rules and does not require an air permit. The project consists of physically lengthening the first section of the combustion chamber on each of the two dryers, dryers No. 6 and No. 7, at the Louis Dreyfus Citrus facility. The project will not result in a change in the fuel usage, heat input or processing capacity of either dryer. This change will not increase potential emissions from the dryers and may reduce mass emissions of VOC and carbon monoxide as a result of extended gas residence time in the combustion chamber. The project is being undertaken to improve dryer operations and potentially reduce emissions of VOC and carbon monoxide.

Although Louis Dreyfus Citrus has another permitting action pending, this project is not apparently related to that pending action. Given the facts presented in your letter, and evaluating this project as an isolated project, the Department agrees that no air construction permit is required for Louis Dreyfus Citrus to proceed with lengthening the first section of the combustion chamber on each of the two dryers.

Please contact me at 850-921-9519 if you have any questions about the above.

Sincerely,

Joseph Kahn, P.E.
New Source Review Section

/jk

cc: Len Kozlov, P.E., DEP SWD (w/ K&A letter)
Marie Driscoll, Orange County EPD (w/ K&A letter)

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-00-03

August 3, 2000

RECEIVED
AUG 04 2000
BUREAU OF AIR REGULATION

VIA FAX AND MAIL

Mr. Joe Kahn
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Louis Dreyfus Citrus, Inc.
Citrus Peel Dryer Work
Permitting Applicability Determination

Dear Joe:

As I discussed with you recently, Louis Dreyfus Citrus, Inc. (Dreyfus) intends to undertake some off-season maintenance and operating improvements to the No. 6 and No. 7 citrus peel dryers and requests a determination on the permitting applicability of the project. As I explained to you, the project will only involve the lengthening of the combustion chambers of the two dryers. The project will not result in a change in the fuel use or heat input to either dryer, a change in the evaporative capacity or peel throughput of either dryer or a potential increase in the emission rate of any regulated air pollutant from either dryer. The project will result in a greater gas residence time in the combustion chamber; and hence, the project is expected to improve the stability of dryer operation, provide assurance that there will be complete fuel burnout and possibly result in a reduction in VOCs and/or carbon monoxide emissions as a result of extended thermal oxidation time.

As I am sure you are aware, the combustion chambers of the Dreyfus citrus peel dryers consist of an endplate to which the burner is mounted and then a cylindrical horizontal section oriented in a north-south direction (relative orientation). This cylindrical section is approximately eight feet in diameter, 14-15 feet in length and refractory lined. The fuel (natural gas) and combustion air are fired through a burner tube centered along the axis of the combustion chamber and extending well into the first section of the combustion chamber. The recirculated dryer exhaust gases are introduced into the annular space between the burner tube and the outer shell of the combustion chamber and mix with the combustion gases downstream of the end of the burner tube. Following this first section of the combustion chamber is a second horizontal cylindrical section oriented in an east-west direction (relative orientation). This section is also approximately eight feet in diameter, about 20 feet in length and

refractory lined. The third section of the combustion chamber is, again, a horizontal cylindrical section oriented in a south-north direction (relative orientation). This third section of the combustion chamber discharges into the feed end of the rotary dryer at the point where the pressed peel enters the dryer.

The purpose of the combustion chamber is to provide for the complete combustion of the fuel fired to the dryer and to allow for the transfer of the heat of combustion to the excess air and recirculated dryer gases as these hot gases provide the drying medium in the rotary section of the dryer. The purpose of the two right angle bends in the combustion chamber is to prevent flame impingement on the peel and thus, eliminate the potential for peel fire in the dryer.

The project that Dreyfus will be undertaking involves the physical lengthening of the first section (the section between the burner and the first bend of the combustion chamber) from approximately 14 feet to approximately 30 feet. The purpose of this extension is to improve the stability of dryer operations by moving the flame tip back from the dryer entrance to allow for complete fuel burnout and for better mixing of the combustion gases with the recirculated dryer exhaust gases. It is anticipated that this increased residence time and improved mixing might also result in the thermal destruction of some of the volatile organic compounds (VOCs) in the recirculated dryer gases, and possibly, a reduction in the carbon monoxide generated during the combustion process. As stated previously, the project will not result in a change in the fuel use or heat input rate to the dryer; it will not change the evaporative capacity or peel throughput to the dryer; and, based on standard combustion calculations, it will not result in potential increases in the emissions of any regulated air pollutants. As such, the project is not a modification as defined in Rule 62-210.200, F.A.C.

The purpose of the project is to improve the dryer operations and to potentially reduce VOCs and carbon monoxide emissions. I would appreciate your review of this matter and a written determination as to the applicability of air permitting. If further information is required to define the scope of the project, please do not hesitate to contact me at 352-377-5822. Thank you for your consideration of this matter.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:wa

C: Mr. Paul Ballentine
Mr. Jim Alves

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Joseph Kahn

2. ARM/BAR

3.

4.

5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

✓ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

✓ FOR YOUR FILES

COMMENTS:

MS-5505

FROM: Alan Cohn DATE: 6/21/2000 PHONE: _____

DEP 15-026 (12/93)

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

Koogler and Associates
4014 NW Thirteenth Street
Gainesville, Florida 32609
Attention: John Koogler, PhD.,P.E.

OCD-AP-00-150

Orange County - AP
Louis Dreyfus Citrus, Title V Air Operate Permit

Dear Mr. Koogler:

This office received your letter dated June 9, 2000 in which you requested some permit changes on behalf of Louis Dreyfus Citrus. The company requests raising the hourly limit from 175 to 250 pounds VOC per hour and decreasing the annual peel rate from 71,659 to 50,247 tons per year.

Based upon the information contained in the past two stack tests, the facility has operated as a PSD facility, therefore, your letter has been forwarded to DARM in Tallahassee for processing as a PSD project.

If you have questions, please fax Alan Zahm at 407.897.5963 or write to the above address.

Sincerely,

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

DATE: 6-20-00

LTK/az
Cc: John Ballantine
Joseph Kahn
Al Linero
Anna Hacha Long
c:alan/letters/dreyfus_psd project_sent to Tally

RECEIVED
JUN 22 2000
BUREAU OF AIR REGULATION

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 118-00-03

June 9, 2000

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To Joe Kahn	From Len Kozlov
Co. DARM	Co. Air Section/Orl
Dept. Tally	Phone # 407/894-7555
Fax #	Fax #

Mr. Alan Zahm, P.E.
Florida Department of
Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Subject: Louis Dreyfus Citrus, Inc
Requested Change to Permit No. 0950053-005-AC

Dear Mr. Zahm:

This is to request two changes in the above referenced construction permit recently issued to Louis Dreyfus Citrus, Inc. The changes are necessary in view of recent stack test information on the citrus peel dryers, presented in Attachment 1. This request is for an interim permit change pending review of an application for new source review to be submitted later this month to FDEP's Tallahassee office, as suggested by Len Koslov.

1. The VOC emission limit, applicable to Dryer No. 6 and 7, should be revised from 175.3 to 250.0 pounds per hour.

2. The allowable annual peel processing rate, stated in Specific Condition 1a and 2a, should be changed from 71,659 to 50,247 tons per year, as calculated in Attachment 1.

It should be noted that the annual VOC emission cap remains unchanged. Consequently, there is no change in the rule applicability associated with the review of the above construction permit.

This request is submitted in a preliminary format suggested by Debra Leisure in a telephone conversation with Pradeep Raval.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par
Encl.

c: Paul Ballentine, LDC

ATTACHMENT 1

UPDATED VOC EMISSIONS CALCULATIONS

Air emissions measurements conducted on the No. 6 and 7 dryers in April 2000, provided the following information:

UNIT /Run#	PEEL INPUT, tph	VOC EMISSIONS, lb/hr
Dryer 6		
Run 1	41.62	200.60
Run 2	42.34	226.27
Run 3	43.69	190.70
Dryer 7		
Run 1	45.26	214.60
Run 2	41.86	212.70
Run 3	44.70	214.10

The above test data indicate a maximum hourly VOC emission rate of 226.27 lbs/hr when the dryers are operating at 90-100 percent of peel input capacity. In order to maintain some flexibility in the emission rate relative to compliance demonstration, a new VOC emission limit of 250 lb/hr seems reasonable.

Given the annual VOC emission cap of 457 tpy, a new limit on annual peel processing rate is calculated as follows:

Annual Peel Rate = 175.3 lb/hr (old limit) x 1/250 lb/hr (new limit) x 71,659 tons bone dry peel
= 50,247 tons per year bone dry peel.

Testing conducted on the pellet coolers indicated that the VOC emission rates averaged 7.34 lbs/hr and 8.46 lbs/hr for the East and West Pellet Coolers, respectively. These emission rates are well within the permitted emission limit of 13.4 lb/hr. Therefore, no changes are deemed necessary to the current VOC emission limits on the pellet coolers.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Paul Ballentine, Plant Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **Louis Dreyfus Citrus, Inc.**
   Street Address: **P.O. Box 770399**
   City: **Winter Garden** State: **FL** Zip Code: **34777-0399**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: **(407) 656-1000** Fax: **(407) 656-1229**
4. Owner/Authorized Representative or Responsible Official Statement:

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

Signature Date 6/9/00

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **John B. Koogler, Ph.D., P.E.**
   Registration Number: **12925**
2. Professional Engineer Mailing Address:
   Organization/Firm: **Koogler & Associates**
   Street Address: **4014 NW 13th Street**
   City: **Gainesville** State: **FL** Zip Code: **32609**
3. Professional Engineer Telephone Numbers:
   Telephone: **(352) 377 - 5822** Fax: **(352) 377 - 7158**

4. Professional Engineer Statement:

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

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

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

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

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

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

Signature 6/9/00 Date

(seal)

* Attach any exception to certification statement.

Memorandum

Florida Department of
Environmental Protection

To: Len Kozlov, P.E.
Central District
Via Fax at 407/897-5963

From: Joseph Kahn, P.E.
New Source Review Section

Date: February 9, 2000

Re: Reconsideration of Past Actual Emissions for PSD Synthetic Minor Permit

---

Per your request, this memo will document my conversation with Jim Little of EPA Region 4's New Source Review Section regarding whether the Department has the authority to reconsider the calculations of past actual emissions that were relied upon for the issuance of a PSD synthetic minor permit in late-1997, and whether the Department may issue a revised synthetic minor permit that provides for increased emissions without triggering PSD review. At particular issue is the request of Koogler and Associates to revise the PSD synthetic minor permit for Louis Dreyfus Citrus, f/k/a Winter Garden Citrus, to gain an additional approximately 100 tons per year of allowable VOC emissions by increasing the past actual emissions estimate by the same 100 tons per year. The applicant contends that more accurate information is now available to estimate past actual emissions. By telephone call with me on February 3rd, Jim Little confirmed that EPA would allow, in very rare cases, a permitting authority to revise a PSD synthetic minor permit to increase (or in other cases reduce) emissions based on a reconsideration of past actual emissions, when warranted because the new methodology for estimating past actual emissions is more accurate or relies on better data. Mr. Little stressed that such an action should be very rare and should occur relatively soon after issuance of the synthetic minor permit. The decision to reconsider past actual emissions and revise the synthetic minor permit would be at the discretion of the permitting authority but would be subject to EPA review of the draft permit revision.

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT _____

FAX TRANSMITTAL FORM

TO: Joe Kahn

FAX NO. _____

FROM: John Koogler

DATE: 2/8/00 SENT BY: Wendy

The text being transmitted consist s of 5 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: _____

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

MEMORANDUM

VIA FAX

TO: Len Kozlov, FDEP, Orlando
Alan Zahm, FDEP, Orlando

FROM: John Koogler

DATE: February 8, 2000

SUBJECT: Louis Dreyfus Citrus Inc.
Comparison of 12/97 Permit (0950053-004-AC) Conditions with Requested Conditions of 11/99 Permit (0950053-005-AC)

I'd like to express our appreciation for meeting with us on February 3, 2000, to discuss the concerns we expressed in my letter of November 22, 1999, regarding Permit 0950053-005-AC. Hopefully, as a result of that meeting, I understand the issues that were a concern to you regarding the changes in our calculation of past actual VOC emissions and the associated change in peel processing rate. Our analysis, presented below, shows the requested increase in the peel processing rate is proportional to (consistent with) the change in past actual VOC emissions. As a result, the requested permit amendment is not a modification that would result in a PSD analysis.

Regarding a PSD review, Dreyfus is of the opinion that this may be something we will need to face in the future. However, at this time, there are two issues that lead us to request that Permit 0950053-005-AC be amended as requested and issued. The first, and most pressing, issue is compliance with the hours of operation presently in the Title V permit. As you will recall, the condition in Permit 0950053-004-AC setting hours of operation for Dryers No. 6 and No. 7, combined, is probably the single most dominant condition that lead to the application for the amended permit. The second issue is proposed legislation, proposed by FDEP, that could legislate emission limits for citrus processing plants, thus eliminating the need for PSD permitting. Until this legislative initiative has been heard, we believe it is in our best interest to wait and see.

Regarding the differences in past actual VOC emissions and peel processing rate (or the associated fruit throughput rate) of Permits 0950053-004-AC and 005-AC, I offer this analysis:

Permit 0950053-004-AC (12/97)

Permitted wet peel to Dryers No. 6 and No. 7 combined

= 185,490 tpy (at 70% moisture)

Bone dry peel = 185,490 tpy x (1-0.70)

= 55,647 tpy

Raw peel @ 84% moisture

= 55,647 tpy/(1-0.84)

= 347,794 tpy

Fruit throughput @ 35 lb raw peel per box

= 347,794 tpy x 2000 lb/ton x 1/35 lb/box

= 19,873,929 boxes/yr

VOCs from dryers = 355.2 tpy (past actual + less than a significant increase)

VOCs per bone dry ton of peel

= (355.2 tpy x 2000 lb/ton/55,647 b.d. tpy)

= 12.76 lb VOC/b.d. ton peel

Permit 0950053-005-AC (11/99)

Requested bone dry peel to dryers (per my letter of 12/3/99)

= 71,659 tpy (at zero moisture)

Equivalent wet peel to dryers

= 71,659 tpy/(1-0.70)

= 238,863 tpy (at 70% moisture)

Equivalent raw peel @ 84% moisture

= 71,659 tpy/(1-0.84)

= 447,869 tpy

Fruit throughput @ 35 lb raw peel per box

= 447,869 tpy x 2000 lb/ton x 1/35 lb/box

= 25,592,500 boxes/yr

VOCs from dryers (per my letter of 12/3/99)

= 457.1 tpy (recalculated past actual + less than a significant increase)

VOCs per bone dry ton of peel

= (457.1 tpy x 2000 lb/ton)/71,659 b.d. tpy

= 12.76 lb VOC/b.d. ton peel

From this analysis, it can be seen that past actual VOCs from the dryers increased from 355.2 tpy to 457.1 tpy as a result of using a refined method of calculation (the "mass balance" approach) as suggested in the Department's memo of October 15, 1999. According to Joe Kahn, as stated during our February 3, 2000, meeting (by telecon), changes in past actual emissions (increases or decreases) are justifiable and acceptable to EPA under certain circumstances. Our opinion is that this is one of those circumstances.

Associated with the change (increase) in past actual VOC emissions reflected in the application for Permit 0950053-005-AC is a change in peel processing rate. The analysis shows, however, that the change (increase) in the peel processing rate is directly proportional to the change in the VOC emissions from the dryers. The pounds of VOC per ton of bone dry peel are identical in both cases; 12.76 lb VOC/b.d. ton of peel. In Permit 0950053-005-AC, we are not asking for a disproportionate increase in peel processing rate that would increase the potential to emit and thus trigger a PSD review.

The second matter we were asked to look at was the factor "0.492" that represented the fraction of unrecovered VOCs (the difference between available oil and recovered essence oil, cold press oil and d-limonene) that is emitted to the atmosphere from the dryer and cooler combined. The factor "0.492" resulted from my analysis of all of the FCPA/FDEP test data. We were asked to examine only the data from the Dreyfus (Winter Garden Citrus) plant and to develop a comparable factor with only these data. The data from the FCPA/FDEP test program were evaluated as these were the only data available that were representative of 1994-95 Dreyfus plant operations (the two years selected for past actual VOC emission calculations).

FCPA/FDEP TEST DATA

Dryer press cake = 44.67 tph @ 70.8% moisture
= 13.04 tph b.d. peel

Oil in pellets @ 5.0 lb/b.d. ton (measured)
= 13.04 tph x 5.0 lb/ton
= 65.2 lb oil/hr

Oil in dry peel @ 7.6 lb/b.d. ton (measured)
= 13.04 tph x 7.6 lb/ton
= 99.1 lb oil/hr

Oil loss in cooler (calculated)
= 99.1 lb/hr – 65.2 lb/hr
= 33.9 lb/hr

Oil in press cake @ 31.8 lb/b.d. ton (measured)
= 13.04 tph x 31.8 lb/ton
= 414.7 lb oil/hr

Oil in stack gas (measured)
= 265.9 lb/hr

Oil loss (combusted) in dryer (calculated)

= 414.7 lb/hr – (265.9 + 99.1) lb/hr

= 49.7 lb/hr

Summary

Peel Oil	Lb/hr	% of Oil to Dryer
To Dryer (in press cake)	414.7	100.0
To Dryer Stack	265.9	64.1*
Destroyed in Dryer	49.7	12.0
In Dry Peel	99.1	23.9
In Pellets	65.2	15.7
To Cooler Stack	33.9	8.2*

*VOC to Dryer and Cooler Stacks = 64.1 + 8.2

= 72.3%

Using Dreyfus data only results in 72.3 percent of the peel oil entering the dryer being released to the atmosphere (665.7 tpy for 1994 and 1995) rather than 49.2 percent as calculated from all plants (453.0 tpy).

Using the data presented in my December 3, 1999, letter, in my opinion, represents the most reasonable estimate of past actual emissions available. Using Dreyfus FCPA/FDEP data only will increase past actual VOC emissions by 47 percent. No other data are available that are representative of 1994-95 Dreyfus plant operations. We therefore suggest using the past actual emissions and the resulting proposed emission limits set forth in my December 3, 1999, letter in Permit 0950053-005-AC.

As the increase in the peel processing rate requested in Permit 0950053-005-AC is proportional to the increase in past actual VOC emissions and as the calculation of past actual VOC emissions is based on the most conservative approach available, we urge that you amend Permit 0950053-005-AC as requested in my letters of November 22 and December 3, 1999, and issue the permit. As stated previously, we will probably address a PSD review at a later date.

Thank you for your consideration.

C: Mr. Joe Kahn, FDEP
Mr. Rick Tomlin, Dreyfus
Mr. Paul Ballentine, Dreyfus

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 118-97-02

FAX TRANSMITTAL FORM

TO: Joe Kahn
850/922-6979

FAX NO.

FROM: John Koogler

DATE: 2/2/00 SENT BY: JSK

The text being transmitted consist s of 13 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: Joe - Info related to Dreyfus (Winter Garden Citrus) telecon on 2/1/00. See Avail Oil data, oil recovery data, oil in pellet data & proposed baseline VOC

COPY

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-97-02

December 3, 1999

VIA FAX AND MAIL

Mr. Len Kozlov
Florida Department of
Environmental Protection
3319 Maguire Blvd, Suite 232
Orlando, FL 32803

Subject: Louis Dreyfus Citrus Inc.
FDEP Permit 0950053-005-AC
Site Specific Available Oil Data

Dear Len:

I appreciated the phone call from you and Alan Zahm on November 30, 1999, regarding our comments of November 22, 1999, on the final air construction permit issued to Louis Dreyfus Citrus Inc. (Dreyfus). In response to your call, we have updated Attachment 8 to our original permit application by incorporating available peel oil data from Dreyfus measured during the 1997/1998 and 1998/1999 seasons. These data provide measurements of available oil in the early-mid season crops and the Valencia crops for both seasons and in the grapefruit crop for the 1998/1999 season only. These data show available oil contents somewhat lower than reported by Braddock. Copies of these data are attached.

The site specific available peel oil data were input to our calculations in Attachment 8 and a revised baseline VOC emission rate has been calculated. Based on this revision, the amount of bone dry peel that can be processed decreases from 74,648 tons per year to 71,659 tons per year and some of the emission rates change. To facilitate your review, I have also attached a copy of Permit 0950053-005-AC with the changes reflected in revised Attachment 8 noted.

Mr. Len Kozlov
Florida Department of
Environmental Protection

December 3, 1999
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If you will incorporate these revisions in the referenced permit and make the other changes noted in our November 22, 1999, I would appreciate it. We appreciate your efforts in working with us on this permit and will provide additional data if it should be required.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:wa
Enc.

c: Mr. L. Richard Tomlin
Mr. Paul Ballentine

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

TOTAL AVAILABLE PEEL OIL

LOUIS DREYFUS CITRUS INC

1997/1998 AND 1998/1999

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

TOTAL AVAILABLE OIL
LOUIS DREYFUS CITRUS INC.

EARLY-MID SEASON - 1997/1998

Date	Total Available (lb oil/ton fruit)
11/4/97	8.00
11/5/97	8.80
11/6/97	8.80
11/7/97	
11/8/97	
11/9/97	
11/10/97	8.50
11/11/97	8.80
11/12/97	8.20
11/13/97	7.43
11/14/97	7.43
11/15/97	
11/16/97	
11/17/97	7.23
11/18/97	8.11
11/19/97	8.11
11/20/97	7.77
11/21/97	7.90
11/22/97	7.90
11/23/97	
11/24/97	7.90
11/25/97	7.84
11/26/97	7.84
11/27/97	
11/28/97	7.98
11/29/97	7.98
11/30/97	
12/1/97	7.50
12/2/97	7.34
12/3/97	8.90
12/4/97	8.90
12/5/97	8.36
12/6/97	7.55
12/7/97	
12/8/97	8.00
12/9/97	7.50
12/10/97	8.90
12/11/97	8.10
12/12/97	8.10
12/13/97	7.02
12/14/97	
12/15/97	
12/16/97	7.96
12/17/97	7.96
12/18/97	8.91
12/19/97	8.91
12/20/97	8.91
12/21/97	9.81

Date	Total Available (lb oil/ton fruit)
12/22/97	8.62
12/23/97	8.57
12/24/97	8.43
12/25/97	
12/26/97	9.39
12/27/97	8.91
12/28/97	8.16
12/29/97	8.77
12/30/97	8.16
12/31/97	7.17
1/1/98	9.02
1/2/98	8.39
1/3/98	8.23
1/4/98	8.06
1/5/98	8.91
1/6/98	11.97
1/7/98	8.20
1/8/98	8.43
1/9/98	8.43
1/10/98	8.48
1/11/98	7.92
1/12/98	8.95
1/13/98	8.20
1/14/98	10.00
1/15/98	8.20
1/16/98	7.92
1/17/98	8.84
1/18/98	7.14
1/19/98	8.30
1/20/98	9.52
1/21/98	8.36
1/22/98	8.36
1/23/98	7.55
1/24/98	7.55
1/25/98	8.36
1/26/98	8.09
1/27/98	8.68
1/28/98	10.20
1/29/98	8.02
1/30/98	9.11
1/31/98	8.64
2/1/98	9.11
2/2/98	10.74
2/3/98	8.84
2/4/98	9.04
2/5/98	8.53
2/6/98	9.04
2/7/98	9.04

Date	Total Available (lb oil/ton fruit)
2/8/98	8.61
2/9/98	8.91
2/10/98	8.62
2/11/98	8.86
2/12/98	8.06
2/13/98	8.70
2/14/98	10.47
2/15/98	9.72
2/16/98	9.90
2/17/98	8.06
2/18/98	8.06
2/19/98	9.04
2/20/98	9.32
2/21/98	8.43
2/22/98	8.43
2/23/98	8.43
2/24/98	8.43
2/25/98	9.93
2/26/98	9.93
2/27/98	9.38
2/28/98	8.54
3/1/98	
3/2/98	8.54
3/3/98	8.09
3/4/98	7.00
3/5/98	7.00
3/6/98	7.00

Avg = 8.48 lb oil/ton fruit
Number of Samples = 110

TOTAL AVAILABLE OIL
LOUIS DREYFUS CITRUS INC.

VALENCIAS - 1997/1998

Date	Total Available (lb oil/ton fruit)
3/10/98	15.00
3/11/98	15.10
3/12/98	14.55
3/13/98	14.20
3/14/98	15.00
3/15/98	0.00
3/16/98	15.00
3/17/98	12.70
3/18/98	13.10
3/19/98	13.69
3/20/98	10.22
3/21/98	
3/22/98	
3/23/98	13.69
3/24/98	11.41
3/25/98	15.00
3/26/98	13.21
3/27/98	14.62
3/28/98	14.62
3/29/98	0.00
3/30/98	11.80
3/31/98	12.00
4/1/98	13.87
4/2/98	12.41
4/3/98	12.75
4/4/98	12.75
4/5/98	
4/6/98	14.21
4/7/98	13.32
4/8/98	14.50
4/9/98	12.98
4/10/98	13.10
4/11/98	14.42
4/12/98	
4/13/98	14.42
4/14/98	14.96
4/15/98	12.60
4/16/98	13.60
4/17/98	15.57
4/18/98	15.57
4/19/98	
4/20/98	15.50
4/21/98	14.60
4/22/98	14.00
4/23/98	12.00
4/24/98	11.22
4/25/98	14.40
4/26/98	

Date	Total Available (lb oil/ton fruit)
4/27/98	14.90
4/28/98	11.76
4/29/98	10.47
4/30/98	13.26
5/1/98	12.20
5/2/98	12.20
5/3/98	
5/4/98	12.36
5/5/98	11.20
5/6/98	12.50
5/7/98	11.22
5/8/98	13.15
5/9/98	12.10
5/10/98	
5/11/98	13.42
5/12/98	13.05
5/13/98	13.19
5/14/98	13.19
5/15/98	11.86
5/16/98	13.94
5/17/98	
5/18/98	13.94
5/19/98	
5/20/98	10.94
5/21/98	10.94

Avg = 13.27 lb oil/ton fruit
Number of Samples = 61

TOTAL AVAILABLE OIL
LOUIS DREYFUS CITRUS INC.

EARLY-MID SEASON - 1998/1999

Date	Total Available Lbs. Oil per ton of Fruit
11/23/98	10.74
11/24/98	8.64
11/25/98	10.54
11/26/98	
11/27/98	
11/28/98	
11/29/98	
11/30/98	8.50
12/1/98	9.22
12/2/98	8.46
12/3/98	11.45
12/4/98	8.35
12/5/98	8.08
12/6/98	7.41
12/7/98	8.16
12/8/98	8.13
12/9/98	8.35
12/10/98	9.70
12/11/98	11.66
12/12/98	8.09
12/13/98	8.09
12/14/98	7.96
12/15/98	10.04
12/16/98	11.78
12/17/98	8.06
12/18/98	9.97
12/19/98	9.06
12/20/98	8.98
12/21/98	8.98
12/22/98	8.48
12/23/98	8.98
12/24/98	
12/25/98	
12/26/98	
12/27/98	7.71
12/28/98	7.77
12/29/98	8.02
12/30/98	9.93
12/31/98	8.33

Date	Total Available Lbs. Oil per ton of Fruit
1/1/99	7.98
1/2/99	8.51
1/3/99	8.52
1/4/99	9.34
1/5/99	8.72
1/6/99	9.31
1/7/99	6.81
1/8/99	6.99
1/9/99	7.53
1/10/99	5.72
1/11/99	8.13
1/12/99	7.67
1/13/99	8.45
1/14/99	7.62
1/15/99	8.84
1/16/99	9.06
1/17/99	9.48
1/18/99	9.36
1/19/99	8.91
1/20/99	8.62
1/21/99	8.78
1/22/99	9.19
1/23/99	8.98
1/24/99	8.98
1/25/99	8.71
1/26/99	8.39
1/27/99	8.39
1/28/99	8.37
1/29/99	8.33
1/30/99	8.39
1/31/99	
2/1/99	8.54
2/2/99	9.00
2/3/99	8.65
2/4/99	9.19
2/5/99	8.79
2/6/99	
2/7/99	
2/8/99	8.71
2/9/99	8.80
2/10/99	8.23
2/11/99	8.43
2/12/99	8.36
2/13/99	8.79

Average **8.71 lb oil/ton fruit**

Number of Samples = 73

TOTAL AVAILABLE OIL
LOUIS DREYFUS CITRUS INC.

GRAPEFRUIT - 1997/1998

Date	Total Available Lbs. Oil per ton of Fruit
2/19/99	
2/20/99	
2/21/99	
2/22/99	6.15
2/23/99	5.47
2/24/99	5.37
2/25/99	6.32
2/26/99	6.43
2/27/99	
2/28/99	
3/1/99	6.28
3/2/99	6.26
3/3/99	6.53
3/4/99	6.29
3/5/99	5.82
Average	**6.09 lb oil/ton fruit**

Number of Samples = 10

TOTAL AVAILABLE OIL
LOUIS DREYFUS CITRUS INC.

VALENCIA - 1997/1998

Date	Total Available Lbs. Oil per ton of Fruit
3/8/99	
3/9/99	14.70
3/10/99	15.90
3/11/99	12.90
3/12/99	14.50
3/13/99	14.50
3/14/99	14.50
3/15/99	16.00
3/16/99	14.10
3/17/99	15.20
3/18/99	14.10
3/19/99	14.10
3/20/99	
3/21/99	
3/22/99	16.40
3/23/99	14.20
3/24/99	14.30
3/25/99	15.50
3/26/99	14.90
3/27/99	
3/28/99	
3/29/99	14.70
3/30/99	15.10
3/31/99	14.80
4/1/99	13.90
4/2/99	13.70
4/3/99	
4/4/99	
4/5/99	14.70
4/6/99	13.10
4/7/99	13.00
4/8/99	15.00
4/9/99	16.20
4/10/99	16.20
4/11/99	
4/12/99	13.90
4/13/99	14.20
4/14/99	16.30
4/15/99	16.10
4/16/99	17.20
4/17/99	17.20
4/18/99	17.20
4/19/99	16.10
4/20/99	15.70
4/21/99	17.00
4/22/99	15.20
4/23/99	15.70
4/24/99	
4/25/99	
4/26/99	16.70
4/27/99	16.20
4/28/99	15.80
4/29/99	14.30
4/30/99	14.70
5/1/99	
5/2/99	
5/3/99	15.50
5/4/99	16.20
5/5/99	14.70
5/6/99	14.60
5/7/99	13.60
5/8/99	
5/9/99	
5/10/99	13.40
5/11/99	
5/12/99	13.60
5/13/99	14.20
5/14/99	16.40
5/15/99	
5/16/99	
5/17/99	15.30
5/18/99	
5/19/99	15.80
Average	**15.11 lb oil/ton fruit**

Number of Samples = 54

ATTACHMENT 8

EMISSION SUMMARY FOR PERMIT AMENDMENT REQUEST
LOUIS DREYFUS CITRUS, INC.
(Updated 12/99)

The calculation of actual VOC emissions from peel dryers and pellet coolers for the baseline period (1994-1995), for Louis Dreyfus Citrus, Inc. (LDC), has been revised based on historical peel processing rates as opposed to hours of operation. FDEP suggested this approach as the VOC emissions are dependent on peel processing rates.

The baseline emission rates in tons per year (tpy) of particulate matter (PM), particulate matter less than 10 microns (PM10), carbon monoxide (CO), nitrogen oxides (NOX), and sulfur dioxide (SO2) remain as calculated in the WGC permit application dated 7/9/97.

The emission limits established in this application for the citrus peel dryers and pellet coolers are stated in terms of "pounds of pollutant per ton of bone dry peel processed", except for SO2 which is related only to the sulfur content of stand-by fuel oil. This emission rate basis (unit) was selected rather than "pounds per hour" to account for variable peel processing rates, as suggested by FDEP.

The 1994-1995 operation period, previously identified as representative of past plant operations, is used to calculate actual emissions. A VOC material balance is utilized to determine emissions. The attached memorandum, dated 7/29/98, estimates that 45.7 percent of the unrecovered oil is emitted from the dryers while 3.5 percent is either lost as fugitives or emitted from the cooler stack.

The available oil is calculated by multiplying the quantity of fruit processed by the oil content of the fruit. The recovered oil is measured and documented at the plant. The emissions from the dryers and coolers are then estimated as a percentage of the unrecovered oil, as discussed above. The attached spreadsheet provides a summary of the calculations where actual emissions are estimated, and the annual peel rate (operating capacity) is back calculated such that PSD review is not triggered.

The VOC emission calculations in the spreadsheet are explained below.

Actual Emissions (1994-1995)

- Box of fruit, from site log.
- Tons of fruit, multiply boxes by 90 pounds of oranges per box or 85 pounds of grapefruit per box, and then divide by 2000 pounds to calculate tons.
- Total, add spring and fall season subtotals.
- Available oil, in pounds of oil per ton of fruit, based on information from LDC for 1997/1998 and 1998/1999 seasons:

Fruit	Available Oil (pounds of oil per ton of fruit)		
	1997/1998	1998/1999	Average
Early-Mid	8.5	8.7	8.6
Valencia	13.3	15.1	14.2
Grapefruit	-	6.1	6.1

- Available oil, in total pounds of oil, multiply tons of fruit type by the oil content.
- Recovered oil, from site log.
- Oil recovery, divide oil recovered by available oil and multiply by 100 to determine percentage.
- Oil not recovered, subtract oil recovery from available oil.
- Emissions, in pounds per year, multiply unrecovered oil by an emission factor of 0.492 (see attached memorandum).
- Emissions, in tons per year, divide pounds by 2000 pounds per ton.
- Dryer emissions, multiply total emissions by emission factor of 0.457 and divide by 0.492.
- Cooler emissions, multiply total emissions by an emission factor of 0.035 and divide by 0.492.

Proposed Emissions

- Baseline emissions, average of 1994 and 1995 emissions.
- Emissions to avoid PSD, add 39.8 tons to the baseline emissions to keep the increase below 40 tons.
- Emissions from Boiler 8, 0.6 tons per year from the application.
- Emissions from Dryers & Coolers, subtract 0.6 from total emissions.
- Dryer emissions, in tons, multiply emissions by emission factor of 0.457 and divide by 0.492.
- Cooler emissions, in tons, multiply emissions by emission factor of 0.035 and divide by 0.492.
- Dryer emissions, in pounds per hour, from current permit.
- Dryer/Cooler rate, in tons bone dry peel per hour, multiply 45.8 tons by 0.3 (at 70% moisture).
- Dryer Factor, in pounds VOC per ton bone dry peel, divide dryer emissions by dryer rate.
- Annual peel rate, multiply VOC emissions in tons by 2000 pounds per ton and divide by the emission factor in pounds VOC per bone dry peel.
- Cooler factor, in pounds per ton bone dry peel, multiply annual VOC emissions in tons by 2000 pounds per ton and divide by the annual peel rate in tons bone dry peel.
- Cooler emissions, in pounds per hour, multiply factor by cooler rate.

A summary of the requested permit limitations for all the emission units, is attached. It is anticipated that the new construction permit will cap fuel and peel processing rates and remove references to hours of operations for all units on site.

	LOUIS DREYFUS CITRUS ESTIMATED VOC EMISSION CALCULATIONS					
	UPDATED CALCULATIONS - DECEMBER 1999					
YEAR	1994			YEAR	1995	
SPRING				SPRING		
Fruit Processed	Boxes	Tons		Fruit Processed	Boxes	Tons
E/M Oranges	1810963	81493		E/M Oranges	1971006	88695
Valencia	1822804	82026		Valencia	1983894	89275
Grapefruit	464549	19743		Grapefruit	505603	21488
Total	4098316	183263		Total	4460503	199459
FALL				FALL		
Fruit Processed	Boxes	Tons		Fruit Processed	Boxes	Tons
E/M Oranges	2705529	121749		E/M Oranges	1479525	66579
Valencia	0	0		Valencia	0	0
Grapefruit	0	0		Grapefruit	0	0
TOTAL				TOTAL		
Fruit Processed	Boxes	Tons		Fruit Processed	Boxes	Tons
E/M Oranges	4516492	203242		E/M Oranges	3450531	155274
Valencia	1822804	82026		Valencia	1983894	89275
Grapefruit	464549	19743		Grapefruit	505603	21488
Total all	6803845	305012		Total all	5940028	266037
Available Oil @				Available Oil @		
Fruit Processed	lb oil/ton fruit	lbs oil		Fruit Processed	lb oil/ton fruit	lbs oil
E/M Oranges	8.6	1747882		E/M Oranges	8.6	1335355
Valencia	14.2	1164772		Valencia	14.2	1267708
Grapefruit	6.1	120434		Grapefruit	6.1	131078
Ave & Tot	9.94	3033088		Ave & Tot	10.28	2734141
Recovered Oil	1163242	lb oil		Recovered Oil	921199	lb oil
Oil Recovery, %	38.35	%		Oil Recovery, %	33.69	%
Oil Not Recovered	1869846	lbs oil		Oil Not Recovered	1812942	lbs oil
Emissions @0.492	919964	lbs/yr		Emissions @0.492	891968	lbs/yr
	460.0	tpy			446.0	tpy
Dryers @ 0.457	427.3	tpy		Dryers @ 0.457	414.3	tpy
Coolers @ 0.035	32.7	tpy		Coolers @ 0.035	31.7	tpy
Total @ 0.492	460.0	tpy		Total @ 0.492	446.0	tpy

See A Hand Note

(A) (B) (C) (D) (E) (F)

	LOUIS DREYFUS CITRUS, INC.		
	PROPOSED VOC EMISSION CALCULATIONS		
	UPDATED CALCULATIONS - DECEMBER 1999		
Actual Emissions		453.0	tpy
(94, 95 Avg.)			
< PSD significant level		39.8	tpy
Emission to avoid PSD		492.7	tpy
Boiler 8 Emissions		0.6	tpy
Balance		492.1	tpy
Dryers @	0.457	457.1	tpy
Coolers @	0.035	35.0	tpy
Total @	0.492	492.1	tpy
Dryer/Cooler Rate (70% moist.)		45.8	tph
Dryer/Cooler Rate (0% moist.)		13.74	tph bone dry peel
Dryer Emissions		175.3	lb/hr
Dryer Factor		12.76	lb VOC/ton bdp
Annual Peel Rate (0% moist.)		71659	tpy bdp
Cooler Factor		0.977	lb VOC/ton bdp
Cooler Emissions		13.4	lb/hr
NOTE: The annual peel rate cap applies regardless of each individual			
dryer or cooler operation.			

(A) Avg of 183 samples over two seasons

(B) Avg of 115 samples over two seasons

(C) Avg of 10 samples over one season

(D) Actual oil recovery records for the two seasons - Cold press + essence + d-limonene

(E) 49.2% of oil not recovered estimated to be emitted to atmosphere. FDEP memo suggests 100% of oil not recovered or in pellets is discharged. Oil in pellets at Dayton is 5.0 lb/b.d. ton of solids:

For 1994 & 1995, avg fruit processed = 4,279,410 box/yr
Peel solids @ 90 lb/box & 85% moist = 12,835 tons (b.d.)
Oil in Pellets @ 5.0 lb/b.d. ton = 64,191 lb
Emissions: Avail Oil - (Recovered Oil + Pellet Oil)
1994&95 Avg = 2,883,615 - (1,042,220 + 64,191) = 889 tpy

(F) Avg Baseline Emissions claimed by WGC = 453 tpy
(Compare w/ 889 tpy from (E) above)

(G)

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Joseph Kahn

2. ARMS / BAR

3.

4.

5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

✓ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

____ FOR YOUR FILES

COMMENTS:

MS - 5505

FROM: Alan Cahn DATE: 1/4/9[illegible] SC 37[illegible] PHONE: 3335

DEP 15-026 (12/93)

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

Koogler and Associates
4014 NW Thirteenth Street
Gainesville, Florida 32609

OCD-AP-99-388

RECEIVED
JAN 07 2000
BUREAU OF AIR REGULATION

Attention: John Koogler, PhD.,P.E.

Orange County - AP
Louis Dreyfus Citrus, Title V Air Operate Permit

Dear Mr. Koogler:

This office received your letters dated November 22nd, December 3rd, and December 21, 1999 in which you requested raising the emission rate and changing the test date at Louis Dreyfus Citrus Plant. The request to change the emission rate involved raising the VOC rate from 355 to 476 tons per year. The other issue involved changing the test date from January 25th to any time during the fiscal year and not testing by the date of January 25th. The answers will be listed below.

The changing of VOC emission limit to 476 tons per year will not be granted because of a couple of reasons. One is the data using peel oil content is not complete as the data is missing which shows the relationship between emission of VOC and input oil content **at Louis Dreyfus Citrus.** Two, the company has requested to process 305,000 tons of peel per year, which is higher than the last permit of 185,000 tons per year. Three, the change of past actual VOC emissions to future potential emissions for this permit change is greater than 40 tons per year. This would be a PSD change.

With regard to changing the compliance test date in the permit, the Department will entertain a specific test date for this one time annual cycle when testing can occur. You are required to inform the Department /Orange County Environmental Protection Department fifteen days before the actual test date is to occur. Please note that Rule 62-297.310(7) 4, F.A.C. states that "During each federal fiscal year (October 1-September 30), unless otherwise specified by rule, order, or permit, the owner or operator of emissions unit shall have a formal compliance test conducted for...." The existing Title V permit does specify a time period of sixty days in which to do the compliance testing at the height of the citrus processing season as per condition A9. This is in keeping with the rule cited above. Nevertheless, the Department will be happy to revisit this condition after the compliance test for this year has been completed.

Because of these issues and the prospect of PSD applicability for Louis Dreyfus Citrus, I request that you contact this office for a meeting. We can discuss the issues in your last letters, the VOC calculations, and PSD applicability.

If you have questions, please fax Alan Zahm at 407.897.5963 or write to the above address.

Sincerely,

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

DATE: 1-3-00

LTK/

Cc: John Ballantine
Joseph Kahn
Anna Hacha Long
M:zahm/winword/dreyfusletter

CENTRAL DISTRICT

To: file

Through: Len Kozlov, P.E., Program Administrator, Air Resources Management

From: Alan Zahm, P.E., Air Permitting Supervisor

Date: December 27, 1999

Subject: Louis Dreyfus Citrus Plant as a PSD Facility

Our office received a letter from Koogler and Associates regarding the VOC emissions from Dreyfus Citrus. As more information arrives from the consultant, more evidence appears showing that the modification of December 12, 1997 was a PSD project.

Here are some of the facts.

Dryer Capacity (permit 0950053-004-AC, 12-12-97)

Unit 7	45.8 tons/hour
	4050 hours/yr.
	185,490 tons/yr.

Dryer Capacity (permit AO48-239832, 1-5-94)

Unit 6	41.5 tons/hour, 4320 hours/yr.
Units 1 and 2	31.5 tons/hour, 4320 hours/yr.
Combined capacity	315,360 tons/yr.

Amount of Oil in Peel

Early-Mid season	8.5 pound oil/ton
Valencia	13.3 pound oil/ton
Grapefruit	6.1 pound oil/ton

Stack Test, December 12, 1998: Peel Dryer #7

Processing rate	45.7 tons/hr
Heat input	67.7 MMBtu/hr
VOC Emission	175 pounds/hour

Annual Operating Report

The company has shown annual tonnage during 1997 and 1996 at less than 185,490 tons/yr.

Current Application

The most recent permit change (November 1, 1999, draft) limits the peel capacity to 74,648 dry tons (about 250,000 wet tons) per year and does not change the VOC emission limit, at 355 tons/yr. The Koogler letter of December requested an annual processing rate of 305,000 tons of peel per year and an emissions rate of 460 tons per year. The processing rate and the emissions limit are higher than the construction permit issued in 1997 and higher than the recent permit change. The company wants to process more peel. It is not clear how 305,000 tons of wet peel can be granted since that number is higher than any previously submitted.

As a note, 305,000 tons is very near to the value if peel dryer number 6 is operated at the rate in permit AO48-239832 and ignores the rate allowed by current permit.

Permit 0950053-004-AC Granted in December 1997

Louis Dreyfus Citrus requested to build a new peel dryer, number 7, and dismantle units 1 and 2. They also claimed the VOC emission increase would be 39.9 tons/yr. or less. The permit limited peel operation to 185,490 tons/year and combined total hours of operation of 4050 per year. From these numbers the application in 1997 would not be a modification because there dryer capacity was reduced, 315,360 to 185,490 ton/year.

Yet the company believes that their peel capacity is larger than 185,000 tons/year. The correspondence asks for either 250,000 tons of wet peel (November 1, 1999 draft) or 305,000 tons (attachment 8).

By eliminating units 1 and 2 and replacing them with unit 7, and running unit 6 near the 1994 permitted rate, the combined wet peel capacity is 315,000 tons/yr. This represents an increased peel capacity of 14.3 tons per hour at 4050 hours per year, or 57,915 tons/yr. How much VOC emission is accompanied with 58,000 tons of citrus per year? From the December 12 stack test, the early fruit (8.5 pounds oil per ton) was tested at 45.7 tons/hour and emitted 175 pounds per hour of VOC. This is a rate of 3.8 pounds of VOC per ton of early fruit and equates to at least 111 tons of VOC. If the company considered any of the permit changes in 1997 to allow the continued use of peel dryer number 6 at rates allowed in 1994, then the project was a PSD change.

In addition, it is practically impossible to raise the emission limit by 39.9 tons per year, and not change from actual to potential emissions by more than 40 tons. This change is a PSD change.

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-97-02

November 22, 1999

RECEIVED
NOV 23 1999
BUREAU OF AIR REGULATION

Mr. Alan Zahm, P.E.
Florida Department of
Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Subject: Orange County - AP
Louis Dreyfus Citrus, Inc
Comments on Final Permit
Permit No. 0950053-005-AC

Dear Mr. Zahm:

This is in response to FDEP's final construction permit dated November 1, 1999, for the above referenced facility. We would like to discuss a couple of issues that were included in our comments on the draft permit, but that are not reflected in the final permit.

Item 1- Specific Condition No. 10, Dryer VOC Emission Limit: The annual VOC emissions limit for Dryers No. 6 and 7 should be 476.2 tons per year (tpy), as calculated in the application, not 355 tpy. Your office had directed us to discuss the emission calculation procedure with Joe Kahn before submitting the application to your office. The calculations submitted are consistent with our discussions with Joe Kahn. His guidance on the emission calculation approach has since been formalized in order to lend consistency to all the facilities evaluating VOC emissions from citrus processing operations.

This emission calculation procedure provides a consistent basis, of peel processing and fuel use, for evaluating baseline as well as proposed emissions. Specifically to address your concern, Joe Kahn indicated that the emission limitations of the previous construction permit can be modified under this application to change the earlier emissions basis (hourly emission rates and hours of operation) and, simultaneously, make the updated limits federally enforceable. Peel dryer VOC emissions calculations using an hourly emission rate, from an annual compliance test, and multiplied by the annual hours of operation does not reflect the dryer operating factor. A better basis, suggested by FDEP, is peel throughput, used for the updated calculations.

Item 2- Specific Condition No. 14, Use of AP-42 Factors: It is requested that the requirement for demonstrating compliance with products of combustion for the boilers be limited to the documentation of fuel type, quantity and the sulfur content. The additional step of calculating the emissions of PM, NOX, CO and VOC is dependent and unnecessary. Alternatively, it may be specified that emission factors from Version 5 of AP-42 be the used. Our concern is that future revisions to the applicable AP-42 factors could complicate compliance matters. In a similar instance for another industry, FDEP had to formalize compliance/enforcement procedures to avoid such complications.

There are several other minor clarifications that FDEP may choose to include in revising the permit conditions.

1. There appear to be typographical errors in the rule citations contained in Specific Conditions No. 4, 5 and 8.
2. The requirements of Specific Conditions No. 6 and 7 are repeated in Specific Conditions No. 8 and 9, respectively.
3. Specific Condition No. 12 could be clarified by adding the following wording:
   " In order to demonstrate compliance with requirements of Specific Condition No. 10, dryers.."

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par

c: Paul Ballentine, LDC
Joe Kahn, FDEP

INTEROFFICE MEMORANDUM

Date: 23-Nov-1999 09:09am
From: Joseph Kahn TAL
KAHN_J
Dept: Air Resources Management
Tel No: 850/921-9519

To: Alan Zahm ORL 407/894-7555 (ZAHM_A@al.deporl.dep.state.fl.us)
CC: Leonard Kozlov ORL (KOZLOV_L @ Al @ ORL1)

Subject: Re: Copy of Louis Dreyfus Last Permit

It's really an oversimplification to say I would increase the allowable VOC emission limit by over 100 TPY. If this were a simple request for relaxation of the enforceable limits, it would ordinarily trigger PSD. But, as I understand the request, this is not a simple case of requesting a relaxation in emission limitations. Instead, the applicant has requested that the estimate of past actual emissions be reevaluated using a different methodology.

You are aware that I have generally advocated calculating actual and potential emissions for the citrus processing plants based on mass balance of peel oil. Apparently, when John Koogler recalculated baseline past actual emissions for Dreyfus Citrus based on mass balance, he found them to be higher than his previous estimate. He asked me if revising the PSD synthetic minor permit using the new estimate of past actual emission to recalculate allowable emissions would trigger PSD.

I asked Gregg Worley of EPA Region 4's New Source Review Section if such a revision would trigger PSD. He told me that such a revision would not trigger PSD if the permitting agency was reasonably certain that the new method of estimating past actual emissions is more accurate than the previous method. He confirmed this would be true even if the revision would benefit the company by increasing future allowables.

So, if the Department (in this case that's you and Len) approves the revision of the baseline past actual emissions estimate, then you can revise the allowable emissions accordingly and the permit will still be a PSD synthetic minor permit. Someone can petition for an administrative hearing if they don't believe the Department's action is correct. We should also send a copy to EPA with your technical evaluation and ask them to comment on the revision of the baseline. I suppose that if you don't agree that the revised baseline actual emission estimate is appropriate, then you shouldn't approve the change or revise the allowables.

My only substantive comment on the application was that Dreyfus Citrus should estimate past actual emissions using oil contents measured at the facility rather than using Dr. Braddock's average oil values. This would ensure that the mass balance is specific for the Dreyfus plant. Since the original permit was issued by your office, the decision of whether to accept the new estimate and revise the allowable limits is really up to you and Len.

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 22-Nov-1999 09:21am
From: Alan Zahm ORL 407/894-7555
ZAHM_A@al.deporl.dep.state.fl.us
Dept:
Tel No:

To: Joseph Kahn TAL (KAHN_J@Al)

Subject: Copy of Louis Dreyfus Last Permit

Len thinks there will be a hearing on this permit.

Koogler claims that you will allow them to raise the VOC emission limit to nearly 480 ton/year from 360 tons/year. This is based on bone dry peel. They seem to be trying to get around PSD. Remember over a year ago they requested and got a 39.9 ton raise (avoiding PSD). Now they want higher emission factors. Seems like the 39.9 raise would have been PSD also. And we had a third party claim that the 39.9 raise was PSD and the agency wasn't acting properly.

So it goes.

Permittee:
Louis Dreyfus Citrus, Incorporated
Post Office Box 770399
2004
Winter Garden, FL 34777-0399

Atten: Paul Ballentine, Plant Manager

I.D. Number: 0950053
Permit Number: 0950053-005-AC
Expiration Date: September 30,

County: Orange
Latitude/Longitude:
28° 32' 07"N/81° 30' 40"W
UTM: 17-448.8 KmE; 3159.6 KmN
Project: Citrus Processing Plant

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210. 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:

This facility includes citrus peel dryers no. 6 and 7 each equipped with a waste heat evaporator to control particulate emissions; peel cooler west and peel cooler east each equipped with a cyclone to control particulate emissions; and five steam boilers as follows:

- Boiler No. 4 - Titus, 14.34 MMBTU/hr
- Boiler No. 5 - Johnson, 31.35 MMBTU/hr
- Boiler No. 6 - Johnson, Model 538-AHG, 42.0 MMBTU/hr
- Boiler No. 7 - Johnson, Model 53-AHG, 1000 hp
- Boiler No. 8 - 1200 hp

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

This permit replaces the previous construction permit 0950052-004-AC.

This facility is located at 355 South Ninth Street, Winter Garden, Orange County, Florida.

General Conditions are attached to be distributed to the permittee only.

SPECIFIC CONDITIONS:

OPERATING CONDITIONS

1. Peel Dryers no. 6 and 7 are permitted to operate a combined rate of:

   a. 74648 tons of bone dry peel per consecutive twelve months;
   b. 480 MMCF of natural gas (or propane) per consecutive twelve months,
   c. 275,600 gallons of residual fuel oil per consecutive twelve months, with a maximum sulfur content of 1.5% by weight; or, an equivalent prorated annual heat input rate for any combination of natural gas and residual fuel oil and,
   d. 1.5 MMBtu heat input per ton wet peel based upon stack test December 10, 1998, Specific Condition 16, and PSD restriction. The heat input can be raised after a successful stack test which meets the requirements of Specific Condition 10.

   [Rule 62-210.200, (PTE), F.A.C.]

2. The East and West Coolers are permitted a maximum combined input rate of:
   a. 74648 tons per consecutive twelve months of bone dry peel.
   [Rule 62-210.200, (PTE), F.A.C.]

3. Boilers No. 4,5,6,7 and 8 are permitted a maximum combined input of:

   a. 504 MMCF of natural gas (or propane) per consecutive twelve months;
   b. 1,428,000 gallons of distillate fuel oil for only Boiler No. 8 per consecutive twelve months, with a maximum sulfur content of 0.05% by weight; or, an equivalent prorated annual heat input rate for any combinations of natural gas and distillate fuel oil;
   c. 1,347,000 gallons of residual fuel oil for only Boilers No. 4,5,6 and 7 per consecutive twelve months, with a maximum sulfur content of 1.5% by weight; or, an equivalent prorated annual heat input rate for any combination of natural gas and residual fuel oil.

   [Rule 62-210.200, (PTE), F.A.C.]

4. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. [Rule 62-210.296.320(2), (PTE), F.A.C.]

5. Dryer No. 7, East Cooler and West Cooler are subject to Rule 62-296.310(1)(b) Process Weight Table 62-296.310-1, F.A.C. However, the applicant has agreed to the more restrictive particulate emissions limit per Specific Condition No. 10.

6. The visible emission limitation for East and West Coolers, and Dryers No. 6 and 7, are set forth in Rule 62.296.320(4)(b)1., F.A.C. (limited to less than 20% opacity).

7. The visible emission limitation for Boilers No. 4,5,6,7 and 8 shall

comply with Rule 62-296.406(1), F.A.C., (up to 20% opacity, except for one 2-minute period per hour during which opacity shall not exceed 40%).

8. The visible emission limitation for East and West Coolers, and Dryers No. 6 and 7, are set forth in Rule 62-296.310-1, F.A.C. However, the applicant has agreed to the more restrictive particulate emissions limit per Specific Condition No. 10.

9. The visible emission limitation for Boilers No. 4, 5, 6, 7 and 8 shall comply with Rule 62-296.406(1), F.A.C., (up to 20% opacity, except for one 2-minute period per hour during which opacity shall not exceed 40%).

EMISSION LIMITS

10. The following emissions limitations apply to the emissions units:

Dryer No.6 & No.7	**Each Unit** Lb/hr	**Combined** TPY
PM	13.1	35.6
PM_{10}	7.8	21.4
CO	130.7	355
VOCs	175.3	355
NO_x	12.4	33.7
SO2	147.6	33.9

East/West Pellet Cooler(s)	**Each Unit** Lb/hr	**Combined** TPY
PM	1.0	2.8
VOCs	13.4	36.4

Boiler 4,5, 6, 7	**Each Unit**	**Combined** TPY
PM/PM_{10}		12.3
SO2		158.8

Boiler 8	**Each Unit** Lb/hr	**Combined** TPY
PM/PM_{10}	0.7	1.4
SO2	2.4	5.1

11. BACT Determined by DEP:

The amount of particulate and sulfur dioxide emissions from boilers no. 4, 5, and 6 shall be limited by the firing of natural gas or no. 6 fuel oil with a sulfur content not to exceed 1.5%, by weight. The amount of particulate and sulfur dioxide emissions from boiler no. 7

shall be limited by the firing of natural gas or no. 6 fuel oil with a sulfur content not to exceed 2.2%, by weight. The amount of particulate and sulfur dioxide emissions from boiler no. 8 shall be limited by the firing of natural gas or distillate fuel oil with a sulfur content not to exceed 0.05%, by weight.

COMPLIANCE

12. Dryers no. 6,7, and the East and West pellet coolers shall be compliance tested annually in accordance with the following methods:

a)	PM	EPA Method 5
b)	PM10	EPA Method 5 may be used*
c)	CO	EPA Method 10
d)	NOX_x	EPA Method 7E
e)	VOC	EPA Method 25A & EPA Method 18**
f)	SO_2	Fuel oil sulfur content***
g)	VE	EPA Method 9

* With all PM assumed to be PM10

** EPA Method 18 may be used to determine methane emissions, which can be subtracted to determine total non-methane VOC emissions.

*** Per ASTM D4057-88 and ASTM D129-91, ASTM D2622-94, or ASTM D4294-90

Compliance with the SO_2 emission limit will be demonstrated by limiting fuel oil consumption and sulfur content of fuel oil in the two dryers combined.

13. The boilers shall be compliance tested annually by a certified observer in accordance with DEP Method 9 within ninety days after startup. The DEP Method 9 test shall consist of a thirty (30) minute visible emission test.

14. Compliance with the SO_2 emission limit for all the boilers shall be demonstrated by maintaining records on site to verify that each shipment of No. 2 fuel oil has 0.05 percent and No. 6 fuel oil has 1.5 percent or less sulfur and that the sulfur content was determined by ASTM method ASTM D4057-88 and ASTM D129-91, ASTM D2622-94 or ASTM D4294-90, adopted and incorporated by reference in Rule 62-297.440(1), F.A.C. To demonstrate compliance with the PM, NO_x, CO, and VOC emission limits the latest published version of appropriate AP-42 emission factors will be utilized.

15. At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the Orange County Environmental Protection Department. The notification must include the following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test [Rule 62-297.310(7)(a)9, F.A.C.].

16. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this

case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity [Rule 62-297.310(2), F.A.C.].

17. Reports of the required compliance tests shall be filed with the Orange County Environmental Protection Department as soon as practical but no later than 45 days after the last test is completed [Rule 62-297.310(8)(b), F.A.C.].

18. The stack sampling facility must comply with Rule 62-297.310(6), F.A.C., regarding minimum requirements that include but are not limited to: location of sampling ports, work platform area hand rails and toe rails, caged ladder, access and electrical power.

19. The type of fuel and the heat input to the boiler must be entered on the visible emission test report.

20. Pursuant to Rule 62-4.070(3), F.A.C., a monthly log shall be kept for this facility to document compliance with the limitations of specific conditions no. 1,2, and 3. The log shall be completed by the end of the following month and retained on file at the facility for at least three years.

21. A DEP Form No. 62-210.900(5), F.A.C. "Annual Operating Report for Air Pollutant Emitting Facility", including the Emissions Report, shall be completed for each calendar year and submitted to the Orange County Environmental Protection Department on or before March 1 of the following year [Rule 62-210.370(3), F.A.C.].

PERMIT APPLICATION

22. A revised Title V operating permit is required for operation of this source. To obtain an operating permit, the permittee must submit an updated Title V permit application, along with the applicable compliance test results to the Department's Central District office [Rule 62-4.220, F.A.C.]. The application shall be submitted no later than 180 days after the source has been placed in operation.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____

L.T. Kozlov, P.E.
Program Administrator
Air Resources Management

Issued: _____

Permittee:
Winter Garden Citrus, Incorporated

Attention: Paul Ballentine, Plant Manager

I.D. Number: 0950053
Permit Number: 0950053-005-AC
Expiration Date: Sept. 30, 2004
County: Orange

Permittee:
Winter Garden Citrus, Incorporated

Attention: Paul Ballentine, Plant Manager

I.D. Number: 0950053
Permit Number: 0950053-005-AC
Expiration Date: Sept. 30, 2004
County: Orange

CERTIFICATION

Application Number: 0950053-005-AC

APPLICANT: Louis Dreyfus Citrus, Incorporated

PROJECT: Citrus Processing Plant

I HEREBY CERTIFY that the engineering features described in the referenced application for an Air Construction Permit provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 62. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

ALAN ZAHM, P.E.
SEAL 36903

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 118-97-02

August 6, 1999

Mr. Alan Zahm, P.E.
Florida Department of
Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Subject: Louis Dreyfus Citrus, Inc
Permit File No. 0950053-005-AC

Dear Mr. Zahm:

This is in response to your letter dated May 28, 1999, requesting additional information on the above referenced project. The responses are in the order of the issues raised.

1. The oil analyses of the fruit being processed during the compliance testing in December 1998 are as follows:

Unit	Test Date	Fruit Oil Content Analysis Result
Dryer No. 7	December 10, 1999	9.70 lbs Oil/Ton Fruit
Dryer No. 6	December 21, 1999	8.98 lbs Oil/Ton Fruit

The average of the above values for early-mid fruit of 9.34 pounds of oil per ton of fruit compares well with the value used in the calculations of 9.4 lbs oil/ton fruit.

2. The calculations submitted to FDEP are based on data collected from the subject site. Some information, provided by Dr. Braddock regarding citrus oil content in fruit, was used in the calculations to account for the variability in fruit from different groves and variability from year to year. In the case of Item 1 above, it can be seen that the numerical value used in the calculations is representative of the oil content of the fruit processed at the subject site.

3. It is our understanding that the heat input to the peel dryers is controlled by the operator in order to maintain the moisture content of the product. As the peel press operation and the addition of molasses results in press cake (pressed peel) with a moisture content in the range of 67-70 percent, the heat input of the dryer has to be increased when processing wetter peel and decreased when processing peel with less excess water. Any increase in heat input to the dryer is expected to result in increased water vapor in the flue gas stream but no appreciable change in the VOC emission rate. It is also possible that an increase in heat input at steady state conditions would result in greater destruction of VOCs in the dryer burner and hence, the VOC concentrations in the flue gas would be lower. Based on this, FDEP should limit the heat input rate in the permit to the design rated capacity not the rates encountered during testing.

4. The requested analysis could be evaluated using the data from the calculations previously submitted to FDEP presenting the VOC emissions from the dryers relative to the tons of citrus oils processed per twelve consecutive months and the heat input per twelve consecutive months. However, this effort would not be meaningful as the operating season is limited and the fruit type and fruit oil content vary within a year and especially from year to year. It should be noted that the basis and format of the calculations presented in the application follow the recent guidance issued by DARM for evaluating VOC emissions from citrus processing operations.

5. The calculations submitted with the application resulted from ongoing discussions with Joe Kahn and Len Koslov relative to the processing of the recent construction permit. The updated calculations resulted from their comments and suggestions and have been submitted in accordance with the recent guidance issued by DARM for evaluating VOC emissions from citrus processing operations. Also, the PSD applicability evaluation presented in the updated calculations had to use a consistent basis for evaluating baseline and proposed emissions. It would be inaccurate and misleading to use one emissions basis for calculating the baseline emissions (i.e. hours of operation) and a different basis for calculating the proposed emissions (i.e. amount of fruit processed). FDEP has indicated that operating hours are not reliable for emissions calculations and that the preferred basis for emissions calculations is the amount of fruit processed As a result, the updated emissions calculations used this approach. For the requested permit

application review to be valid, the updated emissions calculations must be considered. Also, it is our intent to obtain a construction permit that streamlines the requirements and specific conditions applicable to not only Dryers No. 6 and 7 and Boiler No. 8, but all the emissions units at the facility. This simplified permitting process will also enable the parallel/subsequent Title V permit revision.

If you have any questions, please do not hesitate to call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par

c: Mr. Joe Kahn, FDEP
Mr. Paul Ballentine, LDC

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 21-Apr-1999 10:12am
From: Alan Zahm ORL
ZAHM_A@A1@ORL1
Dept: Central District Office
Tel No: 407/894-7555

To: Joseph Kahn TAL (KAHN_J@A1@DER)
CC: Leonard Kozlov ORL (KOZLOV_L@A1@ORL1)

Subject: Winter Garden Citrus

Our office just received an application from Winter Garden Citrus in which they want permitting changes. The application represents emissions from the entire facility. As such, it could be used as a PSD application.

Given the uncertainty about PSD (it's hard to believe that Winter Garden Citrus is not PSD) would BAR like to process the application as PSD? If so, respond and the check will not be cashed in our office.

The last time the company applied for a construction permit, Clair had an active memo which said that VOC emissions should be ignored when processing citrus plant applications. Evidently that memo is no longer in use and VOC emissions are a current concern.

If I review the application, I want reasonable assurance that the facility is not PSD and will he hard to convince.

What do you have to say?

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 118-97-02

April 8, 1999

Mr. Alan Zahm, P.E.
Florida Department of
Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Subject: Orange County - AP
Winter Garden Citrus
Construction Permit Application

Dear Mr. Zahm:

Enclosed are four (4) copies of a construction permit application for Winter Garden Citrus. A copy of the application is also being sent to Joe Kahn of the DARM staff, as suggested by FDEP. A check in the amount of $250 (permit processing fee) is attached.

This application specifically updates baseline VOC emission estimates, corrects peel dryer natural gas use to be consistent with peel throughput, expresses emission limits for peel dryers and coolers in terms of "pounds per ton bone dry peel" and tons per year (rather than in "pounds per hour"), and caps boiler operations and emissions by limiting fuel use (rather than limiting hours of operation).

It is requested that a single construction permit be issued, with revised conditions for all the emission units at the Winter Garden facility. This will simply the issuance of the Title V permit for the site, based on the parallel processing of the updated Title V permit application (submitted under separate cover).

If you have any questions, please do not hesitate to call me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par
Encl.

c: Colin Cooley, WGC
Joe Kahn, FDEP - DARM

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

John B. Koogler, Ph.D., P.E.
Koogler and Associates
4014 NW 13th Street
Gainesville, FL 32609

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery 6-29-00

C. Signature
X Wendy Quesada ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
XX Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
Z 341 355 320

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

Z 341 355 320

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to	John B. Koogler, Ph.D., P.E.
Street & Number	4014 NW 13th St.
Post Office, State, & ZIP Code	Gainesville, FL 32609
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	0950053-007-AC Mailed: 6-27-00

PS Form **3800**, April 1995

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Joseph Kahn
2. ARM/BAR
3.
4.
5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

✓ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

✓ FOR YOUR FILES

COMMENTS:

MS-5505

FROM: Allan Kahn DATE: 6/21/2000 PHONE: _____

DEP 15-026 (12/93)

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Joseph Kahn

2. AQMS / BAR

3.

4.

5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

✓ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

____ FOR YOUR FILES

COMMENTS:

MS - 5505

FROM: Alan Cahn DATE: 1/4/2000 PHONE: SC 325-3335

DEP 15-026 (12/93)