# **G2** Services Ltd.

#### **CONSULTING ENGINEERS**

3119 Lithia Pinecrest Rd. Valrico, Florida 33594

Phone (813) 685-9727 Fax (813) 684-1691 G2Services@aol.com

October 31, 2002

Florida Department of Environmental Protection Division of Air Resources Management, MS5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400 RECEIVED

NOV 05 2002

BUREAU OF AIR REGULATION

ATTN: Ed Svec

Re: Citrosuco North America, Inc. #1050001

#### Gentlemen:

Enclosed herewith are the following items for your review:

- 1. Four (4) sets of revised construction permit sheets
- 2. Four (4) sets of revised supplemental documents

As discussed in our telephone conversation we would like to substitute the attached sheets in the permit request and delete the oil recovery requirements. The facility has been artificially limited due to the feed mill's inability to hit the target press cake moisture limit. The original design used a 62% press cake moisture rate to derive the 285,700 tpy press cake rate. The actual operating press cake moisture content is approximately 65%. The higher moisture adds 17,000,000 gallons of water to dryers annually. The current 50 tph limit on each dryer is satisfactory, but should be defined as a monthly or seasonal limit.

Should you have any questions please do not hesitate to contact me at my office.

Sincerely,

Wayne E. Griffin, P.E. Managing Partner

cc: Nick Emanuel, C.O.O.

Weg: cms

# RECEIVED

# Owner/Authorized Representative or Responsible Official

NOV 05 2002

1.	Name and Title of Owner/Authorized Represen	itative or Re	sponsible Official		
Ni	icholas A. Emanuel, COO		- VIII (REGERATIO)		
2.	Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Citrosuco North America				
	Street Address: Post Office Box 3950				
		Florida	Zip Code: 33859-3950		
3.	Owner/Authorized Representative or Responsib	ole Official	Telephone Numbers:		
	Telephone: (863) 696-7400		) 696-1303		
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 [X], 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.				
	S/gnature	Da	te		
* /	Attach letter of authorization if not currently on f	īle.			

# **Professional Engineer Certification**

1.	Professional Engineer Name: Wayne E. Griffin, P.E.				
	Registration Number: 19974  Professional Engineer Mailing Address: Organization/Firm: G2 Services				
2.					
	Street Address: 3119 Lithia Pinecrest Rd.				
	City: Valrico	State: FL	Zip Code: 33594		
3.	Professional Engineer Telephone Numbers:				
	Telephone: (813) 685-9727	Fax: (	(813 ) 684-1691		

DEP Form No. 62-210.900(1) - Form

Effective: 2/11/99

#### 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 [X], 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 ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

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

Signature Date

(seal)

Effective: 2/11/99

<sup>\*</sup> Attach any exception to certification statement.

# Construction/Modification Information

CONSTRUCTION PROGRAMMENTON				
1. Description of Proposed Project or Alterations:				
Revise permit to limit facility to 31,666,666 boxes fruit input per year in lieu of a feedmill press cake annual limit. No changes in emissions is anticipated.				
prose outro unation and a second provide				
2. Projected or Actual Date of Commencement of Construction: N/A				
3. Projected Date of Completion of Construction: N/A				
Application Comment				
The facility will use, natural gas as a primary fuel source. Low sulfur #4 will be used as a backup fuel.				

# **ENGINEERING**SUPPLEMENT

PREPARED FOR: Citrosuco North America, Inc.

5927 Highway 60 East Lake Wales, Florida 33853

PREPARED BY: G2 Services

3119 Lithia Pinecrest Rd. Valrico, Florida 33594

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BUREAU OF AIR REGULATION

DATE: 9/4/02 Rev. 10/28/02

10/2/07

#### **GENERAL**

We are requesting replacement of the Section B.1.a of the existing permit with the equivalent box limit. The Citrosuco processes up to 32,000,000 boxes of citrus fruit per season. Products include concentrate, NFC, juice blends, animal feed, and essential citrus oils. The facility was expanded in 2000 to its present capacity.

The facility process approximately 150,000 boxes per day of oranges and/or grapefruit over a 220 day operating season. The primary product is single strength (not from concentrate) juice with a secondary product of concentrated juice. Cold storage facilities are used to store single strength, concentrate, pulp, and essential oils for year round use. Off season, normally July through October, processing includes blending of products for clients, bulk sales, and packaging.

### **EQUIVALENT BOX CALCULATION**

Current limit= 285,700 tpy press cake.

Design moisture of press cake= 62%

38 # of peel/ box of fruit @ 82% moisture

#boxes= 285,000 tpy (1-0.62) X 2000 #/tn / 38# ( 1-0.82) = 31,666,666 boxes

## **EQUIPMENT**

#### **BOILERS**

800 Hp Johnston Boiler #1 1000 Hp Johnston Boiler #2 2000 Hp Johnston Boiler #3 125 Hp Johnston Boiler #4

Boilers are natural gas fired with 0.5% S #4 oil as standby if the natural gas supply is interrupted. Steam is used, primarily, for the juice evaporators and pasteurization. During the fresh fruit season the boilers are cycled up as needed. During the off season the small (125 Hp) boiler is the primary boiler.

#### **FEEDMILL**

2 @ 50 tph (press cake rate) peel dryers

2 @ 24 tph pellet coolers

3 wasteheat evaporators (60,000 #/hr, 110,000 #/hr, and 120,000 #/hr)

Wet peel from the juice extractors is pumped to a reaction tank at the feedmill. After the addition of lime the peel is dewatered in presses prior to

drying. The pressed peel is distributed to either of the two (2) dryers. The dried peel is pelletized and cooled prior to storage. The two (2) coolers exhaust thru cyclones to roof vents. The hot exhaust from the dryers is distributed to three (3) wasteheat evaporators and is scrubbed prior to discharge.