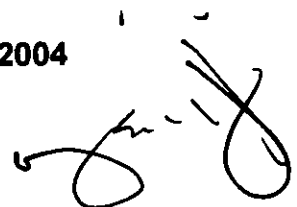


# **ENGINEERING SUPPLEMENT**

**PREPARED FOR:** Peace River Citrus  
POB 730  
Arcadia, Florida 34265

**PREPARED BY:** G2 Services, Ltd  
708 Lithia Pinecrest Rd.  
Suite 101  
Brandon, Florida 33511

**DATE:** May 17, 2004

A handwritten signature in black ink, appearing to be 'J. Smith', located at the bottom right of the page.

## **GENERAL**

The Peace River facility processes up to 13,000,000 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 60,000 boxes per day of oranges and/or grapefruit over a 220 day operating season. The primary product is concentrated juice with a secondary product of single strength juice. Cold storage facilities are used to store concentrate, pulp, and essential oils for year round use. Off season, normally June through October, processing includes blending of products for clients, bulk sales, and packaging.

We are requesting replacement of the process rate limits for the existing dryer, EU 001, (Permit condition III.A.1) and the pellet cooler, EU 003, (Permit condition III.B.1) with an overall facility limit of 13,470,000 boxes per year. The operating hours limits in specific conditions III.A.3 and III.B.2 should be deleted. The operating hours limit for the boilers EU 004, 005, and 006 in permit #0270003-010 AC specific condition 5.B. should be deleted.

## **EQUIVALENT BOX CALCULATION**

Current limit= 32.5 tph for Peel Dryer

Permitted operating hours= 4500 hrs

Annual press cake throughput= 32.5 tph X 4500 hrs = 146,250 tons

Design moisture of press cake= 65%

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

Equivalent #boxes=  $\frac{146,250 \text{ tpy} (1-0.65) \times 2000 \text{ #/tn}}{38\# \times (1-0.82)} = \underline{14,967,105 \text{ boxes}}$

Requested Permit Limit @90% capacity = 13,470,000 boxes per year

## **EQUIPMENT**

### **FEEDMILL**

40,000 #/hr water removal rate peel dryer

15 tph pellet cooler

1 50,000 #/hr wasteheat evaporator

Wet peel from the juice extractors is pumped to a peel bin at the feedmill. After the addition of lime the peel is dewatered in presses prior to drying. The pressed peel is conveyed to the dryer. The dried peel is pelletized and cooled prior to storage. The cooler exhausts thru cyclone out the side of the building. The hot

exhaust from the dryer is sent to the wasteheat evaporator and is scrubbed prior to discharge.

## **EMISSIONS**

This is a record keeping change and is not anticipated to result in any change in emissions. No increase in fuel usage is proposed. No increase in facility capacity is proposed.