



7/11/89

from the desk of

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Bob

MD

Here is the info  
on the Tobacco  
Expansion program  
that we had  
prepared for review  
with the RSR-NABISCO

50706 6381

CFO  
JUL 11 1989

Dan

EXPANDED TOBACCO STRATEGY

● Background

- FREON 11 (Chlorofluorocarbon-11 or CFC-11) used in our tobacco expansion process, is one of five CFC's implicated in the ozone depletion issue.
- Expanded tobacco from current process provides an annual savings of \$147MM in leaf and is a critical ingredient in our ultra lights and WRP/SRP brands.
- United Nations Environmental Program Agreement (Montreal Protocol) phases down the production/use of these CFC's.
  - Effective 1/1/89
  - Freeze production at 1986 levels by 7/1/89
  - 20% reduction - 1993
  - 50% reduction - 1998
  - Scientific data review will likely result in phase-out by 1998 or sooner.
- Legislation and regulatory activities in the U.S. at federal, state/local and EPA to:
  - Regulate
  - Ban
  - Label
  - Tax
- CFC-11 being put on allocation by producers and has potential for imminent short supply (as early as 1990).

## EXPANDED TOBACCO STRATEGY

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### ● Approaches

- Qualify HCFC-123 (a non CFC) for use in expanded tobacco process.
  - 5% of ozone depletion value of F-11
  - Meets 613 process requirements
  - "plug-in" replacement pending tox qualification (complete 9/90)
  - Anticipate commercial availability by late 4Q90 or 1Q91.
  - Cost commensurate with F-11
- Expedite development and commercialization of the propane expansion process.
  - Non-CFC Process
  - High Expansion (100-120%)
  - RJR Process - no license required
- Evaluate and pursue use of CO<sub>2</sub> expanded tobaccos purchased from toll processors and commercialization of CO<sub>2</sub> process.
  - Quantities available to meet critical needs
  - Non-CFC Process
  - Meets functional requirements of products
- Accelerate programs to optimize overall tobacco yield and filling capacity to offset financial impact of expanded tobacco.
  - Leaf Yield
  - Primary Processing Optimization
  - Expanded CRS
  - Improved G-7 Filling Capacity
  - Microwave Drying/Expansion
- Improve/modify current G-13 Process to reduce loss/usage of FREON-11.
  - 30% improvement implemented
  - Additional 20% for implementation identified

**EXPANDED TOBACCO STRATEGY**

● **Next Steps**

- Finalize agreements for toll processing CO<sub>2</sub>-expanded tobacco.
- Work with DuPont to qualify/supply HCFC-123.
- Continue development of high pressure propane process via the pilot line at AVOCA.
- Continue to evaluate commercialization of propane vs. CO<sub>2</sub>.
- RJRT Tox Studies for HCFC-123 and Propane.
  - Mutagenicity
  - Inhalation
  - Chronic

# CURRENT FORECAST G-13 REQUIREMENTS

7/7/89

MM POUNDS

FUNCTIONAL IMPORTANCE	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
<b>CRITICAL FUNCTION</b>							
ULT	9.8	9.1	9.2	9.5	9.5	9.5	9.5
VRP/SRP	.1	.82	2.3	3.9	5.9	5.9	5.9
<b>TOTAL</b>	<b>9.9</b>	<b>10.0</b>	<b>11.5</b>	<b>13.5</b>	<b>15.4</b>	<b>15.4</b>	<b>15.4</b>

**SIGNIFICANT IMPACT**

FF	20.8	18.6	18.7	19.3	19.4	19.4	19.4
FFLT	21.8	20.9	20.0	19.7	18.6	18.6	18.6
EXPORT	10.6	12.0	13.4	15.0	16.1	16.1	16.1
<b>TOTAL</b>	<b>53.2</b>	<b>51.5</b>	<b>52.1</b>	<b>54.0</b>	<b>54.1</b>	<b>54.1</b>	<b>54.1</b>
<b>GRAND TOTAL</b>	<b>63.1</b>	<b>61.5</b>	<b>63.6</b>	<b>67.5</b>	<b>69.5</b>	<b>69.5</b>	<b>69.5</b>

7/6/89

# STRATEGY FOR MEETING EXPANDED TOBACCO REQUIREMENTS

