

BROWN & WILLIAMSON TOBACCO CORPORATION

RESEARCH & DEVELOPMENT

MEETING REPORT

SUBJECT: JOINT WORK BETWEEN B&W AND KIMBERLY-CLARK FOR EBR
IMPROVEMENT/327

LOCATION: Spotswood, NJ

PRESENT: B&W: E. F. Litzinger, W. R. Conway
K-C: S. Kelly, W. Cartwright, U. Hageman,
T. Moskal, K. Desai, J. Bettano

MEETING DATE: October 25, 1990

ISSUE DATE: October 31, 1990

CC: H. C. Woertz, R. F. Denier, B. B. Chakraborty,
J. F. Nall, D. Silberstein (K-C), S. Kelly (K-C),
U. Hageman (K-C)

Elmer Litzinger and Bill Conway met with Kimberly-Clark representatives in Spotswood, on October 25, 1990, to discuss plans and timetables for EBR improvement trials. B&W presented tentative plans, attached.

B&W emphasized that there is interest in both taste improvements and physical quality improvements, but the taste improvement work has clear priority over physical quality work. Six areas of work were discussed:

- Increased basis weight
- Process reactions (additives in extraction step)
- Furnish modifications
- Additives to the concentrated extract (CEL)
- Fillers
- Alternatives to threshing

Increased basis weight trials had already been conducted, producing X-EBR-47 and X-EBR-48 at 25% and 50% increases in basis weight, respectively. K-C was pleased with the performance of the process at the increased basis weights and felt that they had been able to produce a better product under the test conditions.

Six experimental formulas with additives in the extraction step were discussed (list attached). K-C agreed to expedite preparation of hand sheets in the lab, to have 6 samples plus one control to Litzinger by November 9. B&W will reduce the number of experimental samples to 3 for mill trials on November 26 and 27.

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The mill trials will require 125,000 pounds of EBR raw materials and produce approximately the same amount of finished EBR. Approximately half of the production will be standard EBR, with the remainder experimental material. Costs to be discussed by Silberstein and B&W Purchasing.

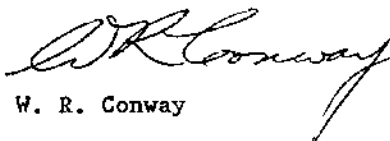
B&W will screen CEL additive candidates and tobacco furnish candidates, with a target of a February mill run.

K-C will assist in preparing hand sheets with fillers to be determined, with a target of a March mill run.

Die-cutting of sheet (instead of threshing) was discussed. K-C said that die-cutting technology (chevron cutter) which had been developed by K-C is in use by LTR in LeMans. There was interest, but die-cutting was given little chance of benefit within the current time frame. K-C will obtain information from LTR and report on feasibility.

K-C expressed interest in scheduling a mill trial in December, if B&W had experiments ready. Repeat trials of Quest additives are a possibility.

K-C promised commitment to B&W schedule needs. Primary contacts to be between Kelly and Conway.



W. R. Conway

WRC/mmb
2346m

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EBR Improvements

- I. Increased Basis Weight**
- II. Process Reactions (Additives in Extraction Step)**
- III. Furnish Modifications**
- IV. CEL Additives**
 - A. Moisture Content/Texture**
 - B. Taste**
- V. Fillers**
- VI. Alternatives to Threshing**

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Process Reactions
(Additives in Extraction Step)

- A. 3% DAP
- B. 2% Ammonium Bicarbonate
- C. 2.5% Urea
- D. 3% DAP/2.5% Urea
- E. 1.5% DAP/2.5% Urea
- F. 3% DAP/2% Ammonium Bicarbonate

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Tentative B&W Plans

B&W R&D work:

Screening of CEL additives for moisture retention/texture improvement.

Screening of CEL additives for taste improvement.

Screening of flavor tobaccos for furnish modification.

K-C R&D Assistance:

Preparation of handsheets for various extraction step additives.

Preparation of handsheets for various fillers.

Evaluation and feasibility of die-cutting or other alternatives to threshing.

Mill Runs:

November Mill Run of 2 samples of extraction step additives.

February Mill Run of 2-4 samples of CEL additives and 2 samples of modified furnish.

March Mill Run of 2 filler samples, 2-3 Quest samples, and 2 "late development" samples.

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