

RG-600 ACTION PLAN

I. THERMOPLASTIC REINFORCEMENT

A. Demonstrate that ecology grade DMP dispersion can produce equivalent properties to DMBP syrup when used as coupling agent for asbestos reinforced thermoplastics

1. Evaluate effects on state of DMBP advancement on end product properties.

(a) Produce DMBP dispersion in various states of advancement; min quantity 30 gal. each higher & lower advancement.

Responsibility: M. Leung/BB Pilot Plant

Schedule: October, 1975.

(b) Produce RG-600 at Niagara Falls pilot plant using (1) above.

Responsibility: R. E. Byrne/J. E. Skvarla

Schedule: November 1, 1975 completion.

(c) Evaluate asbestos-reinforced composites using material produced in (2) above.

Responsibility: M. Leung

Schedule: January 1, 1976 completion.

2. Produce RG-600 in Niagara Falls Pilot Plant as required to meet 1976 sales.

Responsibility: J. E. Skvarla

Schedule: Continuing

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B. Obtain price quotes and commitment from Boond Brook pilot plant to produce DMBP dispersion for near term (i.e. 1976) requirements.

Responsibility: M. Leung

Schedule: October 15, 1975.

C. Obtain tentative commitment and planning purpose pricing from C & P operations to meet longer term (i.e. beyond 1976) commitments.

Responsibility: F. Ancker

Schedule: July 1, 1976

D. Resolve molding problems with RG-600 reinforced polyethylene structural foam.

Responsibility: M. Savers

Schedule: 4th Quarter 1975

E. Establish whether or not C & P is interested in producing and marketing HDPE compounded with RG-600 to structural foam licensees or other natural markets.

Responsibility: W. C. Thurber/R. E. Byrne

Schedule: 4th Quarter 1975

F. Complete engineering studies, cost and schedule for integrating DMBF treatment facilities into King City Plant.

Responsibility: D. Furlani/O. J. Malacarne

Schedule: 3rd Quarter 1975

NOTE: Work has been completed and reported in Design Memo

No. 1, File 1175 "RG 600 Blending

Facility" dated August 28, 1975. This facility is

estimated to cost \$400 M based upon project authorization

1-76, equipment delivery 10-76, and start-up 2-77.

Money for this program has not been included in the 1976

Working Budget.

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G. Develop and implement vigorous marketing program for RG-600. Sales goals are summarized in Table A.

1. Domestic marketing.

(a) Initial Customer visits

i) Major polyolefin producers.

Responsibility: R. E. Byrne

Schedule: May 1, 1976 completion.

ii) Compounders

Responsibility: R. E. Byrne

Schedule: July 1, 1976 completion.

iii) End Users

Responsibility: R. E. Byrne

Schedule: September 1, 1976 completion.

2. Advertising & Sales Promotion.

(a) Trade journal advertisements

Responsibility: J. Crane

Schedule: April-May 1976

(b) Direct mail follow-up to advertising

Responsibility: J. Crane

Schedule: June-July 1976

(c) Prepare technical paper on RG-600 processing

characteristics and property benefits.

Responsibility: F. Ancker

Schedule: July 1, 1976

3. Sales Training

(a) Work with Boundbrook to provide in residence training

re plastics for one or more Calidria sales people.

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Responsibility: R. E. Byrne/F. Ancker
Schedule: 1st Quarter 1976 completion

4. Export Sales

(a) Japan

- i) Supply Tomoe with advertising/sales promotion information.

Responsibility: R.E. Byrne/J. L. Myers

Schedule: June 1, 1976

- ii) Visit Japan for sales training & customer calls.

Responsibility: R. E. Byrne/J. L. Myers

Schedule: July 1, 1976

(b) Europe

- i) Obtain decision from U.C. Europe as to whether they will handle RG-600 marketing.

Responsibility: W. C. Thurber

Schedule: 4th Quarter 1976

- ii) Develop alternate sales agent if required

Responsibility: R. E. Byrne/W. C. Thurber

Schedule: As Required.

- iii) Provide sales training for European sales agent.

Responsibility: R. E. Byrne

Schedule: 1st Quarter 1976

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H. Implement Bound Brook technical support program to complement working activities.

1. Develop processing information in various resins particularly polyolefins.

Responsibility: F. Ancker

Schedule: 1st Quarter 1976

2. Develop cost comparison and cost benefit data vis-a-vis fiberglass and other fillers.

Responsibility: F. Ancker

Schedule: 1st Quarter 1976

3. Provide technical service manpower to support sales calls.

Responsibility: F. Ancker

Schedule: Continuing

4. Extend coupling technology to polar polymers (eg. nylon) as time permits.

Responsibility: F. Ancker

Schedule: 1976-1977

5. Prepare 2000-5000 pounds of HDPE compounded with RG-600 for customer trials.

Responsibility: F. Ancker

Schedule: 1st Quarter 1976

I. Develop additional field data on airborne asbestos fiber dust counts during processing of RG-600 and prepare revised literature on subject for

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presentation to customers.

Responsibility: H. B. Rhodes

Schedule: 1st Quarter 1976

II. DETERMINATION OF PERFORMANCE OF CK-2103 TREATED ASBESTOS AS AN
OIL BASE DRILLING FLUID ADDITIVE.

A. Determine the merits of the product in complete mud formulations
on a laboratory scale.

1. Assemble and present the information needed to motivate
Montello to undertake laboratory evaluation.

(a) Establish projected pricing for commercial quantities.

Responsibility: W. C. Thurber

Schedule: November 1975

(b) Establish projected costs for 10 ton batch for field trial.

Responsibility: J. E. Skvarla

Schedule: November 1975

(c) Prepare technical information package.

Responsibility: H. B. Rhodes

Schedule: November 1975

(d) Technical and business presentation to Montello.

Responsibility: H. B. Rhodes

Schedule: By December 15, 1975

(e) Coordination and encouragement of Montello efforts.

Responsibility: H. B. Rhodes

Schedule: Continuing

2. Preparation of 25 lb. laboratory batch for customer testing.

(a) Preparation of CK-2103 butyl-cellosolve syrup.

Responsibility: M. Leung

Schedule: December 30, 1975

(b) Preparation of 25 lb. of treated product.

Responsibility: B. L. Ingalls

Schedule: January 1976

3. Laboratory verification of properties of sample batch.

(a) Test room temperature rheology properties.

Responsibility: B. L. Ingalls

Schedule: January-February 1976

(b) Test high temperature thermal stability.

Responsibility: M. Leung

Schedule: January-February 1976

B. Determine whether a higher performance CaCl_2 brine-leached product should be offered.

1. Define possible manufacturing conditions and then effect on product properties.

(a) Measure effect of brine concentration, time, temperature, shear and working and filtration procedures on product properties at room temperature.

Responsibility: B. L. Ingalls/H. B. Rhodes

Schedule: 1st Quarter 1976

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(b) Check thermal stability on selected products.

Responsibility: M. Leung

Schedule: 1st Quarter 1976

2. Preparation of preliminary cost estimates.

(a) Flow sheet and estimate of incremental cost to add leach step to process.

Responsibility: Engineering

Schedule: 2nd Quarter 1976

3. Decision for Action.

Responsibility: W. C. Thurber

Schedule: June 1976

C. Obtain an on-site well test of treated product.

1. Manufacture 10 tons of product.

(a) Preparation of syrup.

Responsibility: M. Leung

Schedule: 3rd Quarter 1976

(b) Preparation of product.

Responsibility: J. E. Skvarla

Schedule: 3rd Quarter 1976

2. Coordination and observation of the test to be set-up by Montello.

Responsibility: H. B. Rhodes

Schedule: 4th Quarter 1976

3. Measure dust exposure during test.

Responsibility: H. B. Rhodes

Schedule: 4th Quarter 1976

TABLE A

RG-600 SALES GOALS & DMBP REQUIREMENTS

	<u>RG-600 Sales</u> <u>(M Tons)</u>	<u>RG-600 Sales</u> <u>(Pounds)</u>	<u>DMBP*</u> <u>Reqm't (Pounds)</u>	<u>DMBP **</u> <u>Dispersion</u> <u>Reqm't (Pounds)</u>
1976	0.6	1,200,000	120,000	240,000
1977	1.0	2,000,000	200,000	400,000
1978	2.0	4,000,000	400,000	800,000
1979	2.5	5,000,000	500,000	1,000,000
1980	3.0	6,000,000	600,000	1,200,000

*At 10%

**At 50% DMBP in dispersion.

N. F. Pilot Plant can produce 1.5 ton per shift per Technology Department Monthly Report - May 1975.

∴ Could easily make 15 tons/week x 50 weeks per year = 750 tons on 2 shifts - 5 days basis. This will satisfy planned 1976 requirement for RG-600.

RG-600 ACTION PLAN

- Plan prepared - November, 1975
Plan issued - February 12, 1976
(See attached)
- RG-600 dropped from 1977-81 LRP but
shown as alternate (See attached).
- Success with RG-600 could make Asbestos
SPU really sing.
- Sales goal - 33% of calls each month
to RG-600 customers.