Plastiscope 1

News and Interpretation
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The better-times gap in VCM capacity could lead to new captive ventures

The shortage of VCM that hurt PVC production in 1973 and early 1974, a period of peak demand, could reappear before next summer. There have been no significant additions to VCM capacity since the monomer drought, yet resin makers say they expect to be operating flat out by mid-year (with 588,000 tons/yr. more PVC capacity than existed in mid-1974). Over the past year or so, Georgia-Pacific, Robintech, Firestone, and Tenneco have cumulatively put together a 716,000-ton expansion in PVC capacity, while Clin and Uniroyal, with a total of 128,000 tons, have dropped out.

And if the short-term outlook seems grim for VCM supply, consider the long term. Among existing domestic merchant VCM producers, only Conoco Chemicals offers a word of hope. This producer is studying a four-year expansion of its Lake Charles, La., VCM plant to 450,000 tons (up from a current 272,000). But if demand increases as projected, at least 800,000 tons more of monomer capacity will be needed by 1979.

Merchant buyers are particularly concerned at the prospect of monomer shortage. What they want is an assured source of supply at a realistic price. So they're integrating backward by whatever route seems most feasible—or at least they are giving this strategy some serious thought.

The VCM supply status as 1976 begins

Producer	Current capacity, 1,000 metric tons
Shell Chemical	700
Dow Chemical	636
B.F Goodrich	450
PPG Industries	363
Conoco Chemical	272
Ethyl	205
Allied Chemical	136
Monochem (Borden/Uniroyal)	136
Borden	a
Tenneco Chemical	115[b]
Stauffer Chemical	77
Total	3,090

a: Captive 136,000-ton plant to be built in 1976 at Geismar, La.
b: Closed at press time, but kept on standby status.

Construction of VCM facilities are under way at Borden Chemical and on the timetable at Diamond Shamrock. Borden's first solely owned VCM facility, a 136,000-ton plant at Geismar, La., is scheduled to go on stream in third-quarter 1976. Although Borden owns Monochem 50/50 with Uniroyal, even Monochem's 136,000-ton output would not be sufficient for Borden's current 236,000-ton needs.

Diamond (259,000-ton PVC capacity) is the largest buyer of merchant monomer. Its 450,000-ton VCM plant, proposed for 1978 startup, would use Diamond produced chlorine and purchased ethylene, for which the company has long-term contracts.

PVC producers who also make chlorine have a hole card in the VCM gamble. About 17% of all chlorine produced goes into monomer and the element is getting less abundant as the economy picks up. Georgia-Pacific finds it easy to tie into long-term monomer contracts because it makes chlorine and assures an adequate supply to its VCM sources (Aug. 1975, MP, p. 14). G-P says it has no immediate plans to go into VCM, but does not rule out the long-term possibility. Chlorine-producer Hooker-Ruco also is considering backward integration into VCM.

Acquisition is the route Robintech is hoping to take to assure VCM supply. Robintech is one of several PVC manufacturers negotiating with Allied Chemical for the latter's 136,000-ton VCM plant at Geismar. The deal might make a perfect fit. Robintech's 109,000-ton Painesville, Ohio, PVC operation is already Allied's best VCM customer. Several of Robintech's key executives have worked for Allied and are familiar with the VCM plant's operations. Board chairman and chief executive officer Bradford G. Corbett was formerly president of Allied's Industrial Chemicals Division.

What may be the ultimate irony in the looming shortage is that Tenneco Chemicals, with 115,000-ton VCM plant closed down, but kept on standby status, will probably not demothball it in 1976. The basic economics just aren't there, says the company. Tenneco's plant reacts acetylene with hydrogen chloride, which is more expensive than the conventional ethylene-chlorine process and, furthermore, poses additional OSHA problems. So Tenneco says it will continue to buy its VCM from other producers, at least for a while.

And up go VCM prices. No surprise—or at least it shouldn't have been—was a Jan. 1 price hike for VCM. The increase was 1.6¢/lb., which brings the new price to 12.6¢/lb. Producers who led the move attribute the increase as much to capital expenditures required for compliance with OSHA regulations as to the usual backstream influences (see following item). Almost concurrent with the VCM boost came a ½¢/lb. increase (to 7¢/lb.) for chlorine. And if building-block prices go up, can resin prices be far behind? Answer: The new year was ushered in with a 2¢/lb. increase for general-purpose and film grades of PVC, which already is manifested in product-price hikes by customer companies (see p. 42).

The 'why' of resin price increases

As every customer company knows, announcements of resin price increases are routinely accompanied by a phrase like "due to higher costs." Exactly what these costs are and how much higher they've gone was recently spelled out by T.S. Farmer, president of Borg-Warner Chemicals. Addressing a meeting of some of his major