

**LRC-V-21
MARKETING OPTIONS FOR
CRESOLS AND XYLENOLS
IN A GLOBAL ENVIRONMENT**

CONTRACTOR; Dakota Gasification Company

PRINCIPAL INVESTIGATOR: Gordon Kerns
(701) 221-4400

PARTICIPANTS

<u>Sponsor</u>	<u>Cost Share</u>
Dakota Gasification Company	\$62,000
ND Industrial Commission	<u>28,000</u>
Total	\$90,000

Project Schedule – 3 Months
Contract Date – 7/9/90
Start Date – 8/90
Completion Date – 11/90

Project Deliverables
Status Reports ✓
Final Report – 12/90 ✓

OBJECTIVE / STATEMENT

The objective of this program was to identify the factor that would allow DGC to compete profitably in the global market for cresol and xylenol isomers. The goal of this project was to focus DGC's research and development efforts on the most desirable products for purification and separation. The method to accomplish the objectives was to hire SRI International to perform a market-driven product quality analysis. SRI assembled a database on raw material and product supply and demand. Also, they evaluated trends and price patterns.

STATUS

SRI estimated that DGC could market the crude cresylics stream or produce and market pure isomers. Marketing the crude cresylics stream results in a maximum total stream value of about \$9 million in 1990 and \$9.5 million in 1995. In another option, DGC could produce o-cresol, a m/p-cresol mixture, and a xylenols mixture. Exercising that option would increase the maximum value of products to \$44.5 million in 1990 and \$49.7 million in 1995. A third option for DGC would entail producing o-cresol, p-cresol, m-cresol, 3,5-xylenol, and a xylenols mixture. Exercising this option would increase the maximum value of the products to \$70.5 million in 1990 and \$76 million in 1995. The total annual production of cresylics and xylenols from DGC could be 60 million and 23.8 million pounds respectively. Total annual demand for cresylics in the United States and the world for 1995 is estimated at 70 million and 287 million pounds.