

ABSTRAK

PRARANCANGAN PABRIK EPIKLOROHIDRIN DARI DIKLOROHIDRIN DAN NATRIUM HIDROKSIDA KAPASITAS 16.000 TON/TAHUN (Perancangan Menara Distilasi (MD-301))

Oleh
DELIANA SARI SORMIN

Prarancangan pabrik epiklorohidrin dari diklorohidrin dan natrium hidroksida dengan kapasitas 16.000 ton/tahun akan didirikan di Kawasan Industri Cilegon, Banten diatas tanah seluas 20.540 m². Epiklorohidrin dalam industri kimia digunakan untuk memproduksi resin epoksi, sintetis gliserin, surfaktan, elastomer dan lain-lain. Bahan baku berupa diklorohidrin sebanyak 3.145,80 kg/jam diperoleh dari PT. Jinan Finer Chemical.Co.,Ltd, Cina dan natrium hidroksida sebanyak 934,13 kg/jam diperoleh dari PT. Asahimas Chemical Cilegon.

Jumlah karyawan sebanyak 126 orang dengan bentuk perusahaan adalah Perseroan Terbatas (PT) menggunakan struktur organisasi *line* dan *staff*. Dari analisis ekonomi diperoleh:

<i>Fixed Capital Investment</i> (FCI)	= Rp 562.168.439.812
<i>Working Capital Investment</i> (WCI)	= Rp 99.206.195.261
<i>Total Capital Investment</i> (TCI)	= Rp 661.374.635.073
<i>Break Even Point</i> (BEP)	= 54%
<i>Shut Down Point</i> (SDP)	= 38%
<i>Pay Out Time after Taxes</i> (POT) _a	= 2,57 tahun
<i>Return on Investment after Taxes</i> (ROI) _a	= 24 %
<i>Discounted cash flow</i>	= 33,29%

Mempertimbangkan paparan di atas, sudah selayaknya pendirian pabrik *epichlorohydrin* ini dikaji lebih lanjut, karena merupakan pabrik yang menguntungkan dan mempunyai masa depan yang baik.

ABSTRACT

PRE DESIGN OF EPICHLOROHYDRIN PLANT FROM DICHLOROHYDRIN AND SODIUM HYDROXIDE CAPACITY 16,000 TON/YEAR (Design Distillation Columns (MD-301))

By

DELIANA SARI SORMIN

Pre-design of an epichlorohydrin factory from dichlorohydrin and sodium hydroxide with a capacity of 16,000 tonnes/year will be established in the Cilegon Industrial Area, Banten on a land area of 20,540 m². Epichlorohydrin in the chemical industry is used to produce epoxy resins, synthetic glycerin, surfactants, elastomers and others. The raw material in the form of dichlorohydrin amounting to 3,145.80 kg/hour was obtained from PT. Jinan Finer Chemical.Co., Ltd, China and 934.13 kg/hour of sodium hydroxide obtained from PT. Asahimas Kimia Cilegon.

The number of employees is 126 people with the company form being a Limited Liability Company (PT) using a line and staff organizational structure. From the economic analysis it is obtained:

<i>Fixed Capital Investment (FCI)</i>	= Rp 562.168.439.812
<i>Working Capital Investment (WCI)</i>	= Rp 99.206.195.261
<i>Total Capital Investment (TCI)</i>	= Rp 661.374.635.073
<i>Break Even Point (BEP)</i>	= 54%
<i>Shut Down Point (SDP)</i>	= 38%
<i>Pay Out Time after Taxes (POT)_a</i>	= 2,57 tahun
<i>Return on Investment after Taxes (ROI)_a</i>	= 24 %
<i>Discounted cash flow</i>	= 33,29%

Considering the explanation above, it is appropriate to study the establishment of this epichlorohydrin factory further, because it is a profitable factory and has a good prospect.