

ABSTRACT

PRADESIGN OF EPICHLOROHYDRIN PLANT FROM DICHLOROHYDRIN AND SODIUM HYDROXIDE CAPACITY 50.000 TONS/YEAR (Design Distillation Columns (DC-301))

By

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A plant to produce epichlorohydrin from dichlorohydrin and sodium hydroxide is planned to be located at Purwakarta, West Java. The plant is established by considering availability of raw materials, transportation facilities, readily available labor and environmental conditions.

Capacity of the plant is 50.000 tons/year operating 24 hour/day and 330 working days/year. The plant required 862,78 kg/hr dichlorohydrin and 795,29 kg/hr sodium hydroxide.

Quantity of labor is around 175 people. The plant is managed as a Limited Liability Company (PT), which is headed by a Director who is assisted by a Director of Production and Director of Finance. The company is organized in the form of line and staff structure. From analysis of the plant economy is obtained:

Fixed Capital Investment (FCI)	= Rp 451.126.572.835,51,-
Working Capital Investment (WCI)	= Rp 78.049.580.075,35,-
Total Capital Investment (TCI)	= Rp 529.176.152.910,86,-
Break Even Point (BEP)	= 52%
Shut Down Point (SDP)	= 30%
Pay Out Time after Taxes (POT) _a	= 3 year
Return on Investment after Taxes (ROI) _a	= 20 %
Annual Net Profit (Pa)	= Rp 99.679.724.646,25/year

By considering above the summary, it is suitable study further the epichlorohydrin plant since plant is profitable and has good prospects.