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## **Public summary (Openbare samenvatting) PI quickscan 2008.**

### **Background information**

CP Kelco BV Nijmegen is a CarboxyMethylCeliulose (CMC) multipurpose production plant in The Netherlands which serves the food, feed, pharmaceutical and nutraceutical industry with purified CMC (P-CMC) under the brand names Cekol and Nymcel. Plotsize is 36.000 m<sup>2</sup>. The site is directly located next to the river Waal. The factory organization employs 62 FTE. Cekol™ is a highly purified cellulose gum or cellulose derivative CMC which is mainly used for food and pharmaceutical applications as thickener, stabilizer, binding agent, moisture retention agent, rheology modifier and so on. Nymcel™ is a range of CMC products, low substituted or cross linked, developed for pharmaceutical and nutraceutical applications as mainly tablet disintegrant. Plant output is 10 kton/a divided over two lines.

### **Overall impression**

The (CMC) multipurpose production plant that CP Kelco presently operates has a long tradition. The Nijmegen production site is from origin a rayon manufacturing plant which was erected in 1928. In its sort it was in the early sixties one of the largest employers in the area with close to 2500 employees. End sixties the rayon manufacturing stopped and only the side product CMC continued to be produced. The plant has been modernized to the state of the art plant which it is today. This history reveals two aspects of the process:

- a) The long tradition of CMC manufacture is one of the companies great strengths
- b) This tradition may prevent considering alternative manufacturing routes.

### **Recommendations**

#### **Short term**

1. Energy losses in the ethanol recovery column.
2. Efficiency of water treatment unit.

#### **Medium/long term**

1. Reduction of batch time.
2. Byproduct formation.
3. Product losses to water treatment.

### **The process**

There was an intake in which two employees of CP Kelco and two external PI experts spoke about the production process of CMC. This was a constructive conversation that took 4 hours. After that a pre report came out from the PI experts and this is discussed in a second meeting. The result became the final management report, with the named recommendations as mentioned above.



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