



Puu-127.4040 Environmental Technology in the Pulp and Paper Industry  
(4 cr) Olli Dahl

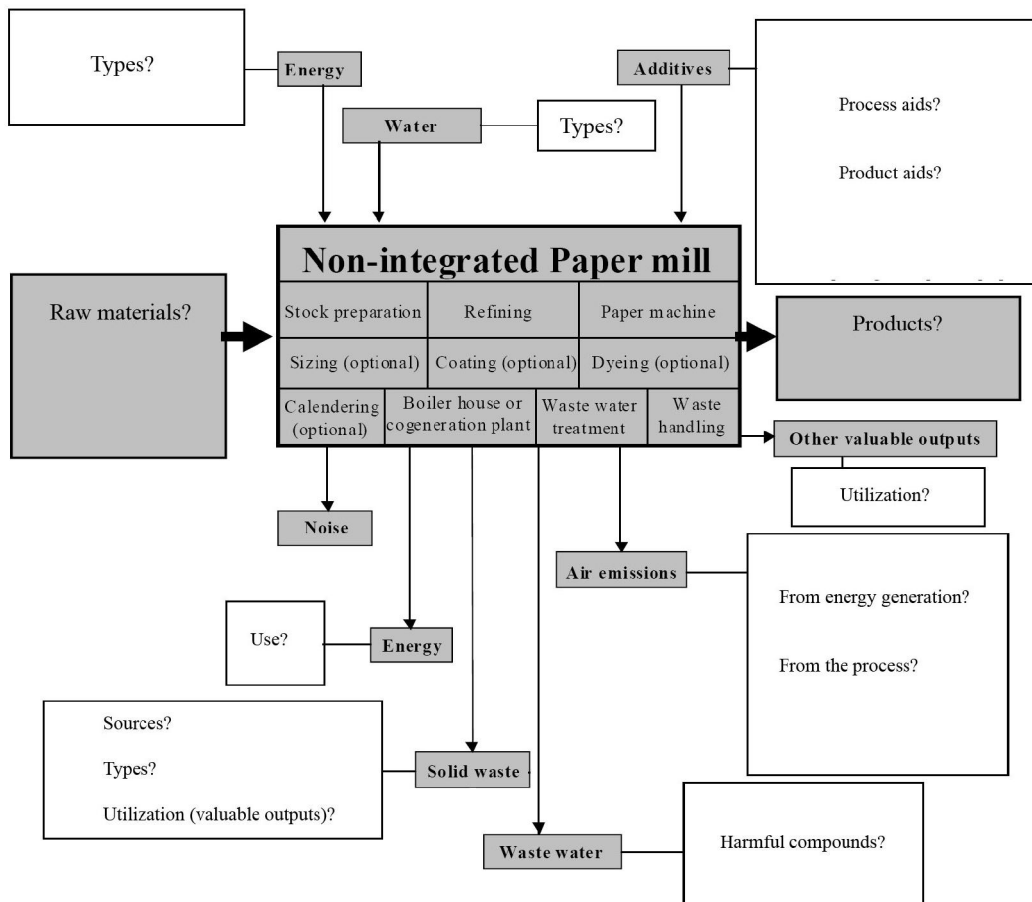
Exam 4.11.2008

Compulsory questions (1 - 2)

1. Briefly explain the following words, abbreviations or principles. 5p. (a 1p)

- Soda dregs
- IPPC principle
- TRS
- Electrostatic precipitation
- Chelation

2. List the various inputs and outputs and their origin into the boxes shown in the figure.





Answer three (3) questions from questions 3 – 6.

3. Discuss the concept of BAT and its assessment in the environmental permitting process. 5p.
4. Describe the cleaning process in processing recycled fibres. 5p.
5. Discuss possible reuse alternatives for wastewater treatment derived sludges from the pulp and paper industry. 5p.
6. Air emissions from chemical pulp production? Briefly describe the release points, sources and the factors that have an effect on emission quantity and quality? 5p.