Environmental protection

An industrial company in Finland must have an environmental permit to operate, following the EU directive. The authorities carefully examine all information given by the companies, and also make visits to the plant site. Restrictive limits to emissions are then given.

Waste-water treatment in industry is very important for the well-being of our lakes and rivers. The waste waters are first purified by a primary clarifier, which makes the big particles in the water settle down to the bottom. Then a biological treatment follows. Small bacteria and microbes will eat the dissolved solids from the waste waters. Then the secondary clarifier separates the biological sludge, and the water is pure and clear to be let out to the rivers and lakes.

Another important environmental aspect in industry is air pollution. Power plants give most emissions in the form of combustion residues. Electric filters or bag filters are used to clean the flue gases. Flue gas scrubbers remove sulfur dioxides as well. The amount of nitrogen dioxides can be reduced by using better combustion techniques, changing the distribution of combustion air and controlling the burning temperature.

Waste handling is very important for everybody. All waste must be sorted according to its origin and handled properly, both in industry and at home. Most waste can be recycled and reused, mainly as material, secondly as energy and thirdly as waste. The last alternative is a landfill site

Noise prevention is also an environmental issue. A lot has been done by building noise walls at busy roads, for instance, and by laws concerning excessive noise at concerts, restaurants and so on. People should look after themselves and use personal ear protectors when there is too much noise. Damage to your hearing cannot always be healed afterwards.

Lähde: Fräki, L., Häkkinen, E. & Kaihari, M. Techno Rules. Technical English.

environmental permit: ympäristölupa directive: direktiivi, toimintaohje

authority: viranomainen plant: tehdaslaitos site: työmaa, tontti

restrictive limit: raja-arvo waste water: jätevesi treatment: käsittely to purify: puhdistaa

primary clarifier: esiselkeytin particle: hiukkanen, kappale to settle down: laskeutua, asettua

dissolved: liuennut solid: kiinteä aine

secondary clarifier: jälkiselkeytin

biological sludge: bioliete

to separate: erottaa power plant: voimalaitos

combustion residue: palamisjäännös

electric filter: sähkösuodin bag filter: letkusuodin

flue: hormi

flue gas: pakokaasu

flue gas scrubber: savukaasupesuri

sulfur: rikki nitrogen: typpi

distribution of combustion air: palamisilman vaiheistus

to control: tarkkailla, ohjata, hallita