

# THE PALSTERNACKAN PROJECT

## – ECOLOGICAL CONVERSION OF APARTMENT BLOCKS

The Palsternackan Housing Estate is situated in Enskede a few kilometres south of central Stockholm. The 51 rented apartments, with about 160 residents, are managed by AB Stockholmshem.

The estate previously consisted of apartments for the elderly. In connection with a renovation in 1995 priority was given to environmentally sound construction materials, greenhouses for the residents and a sewerage system based on urine separation. The residents moved in in the winter of 1995-96. Prospective tenants were required to sign an "environmental contract", in which they promised to comply with certain rules of environmental behaviour.

The urine-separating toilets are Dubbletten models. The seal for the urine bowl is of copper, and the pipe system consists of polyethylene pipes with diameters ranging from 50 to 110 mm. The pipes are laid in a conduit system and the urine is collected in three subsystems of roughly equal size, each with a tank of 30 m<sup>3</sup>.

The tanks are emptied about once a year and the urine transported to storage tanks at Lake Borsjön. The remaining wastewater (faeces, flush-water and greywater) enters the Stockholm wastewater system.

### COMPLEMENT TO THE CONVENTIONAL SYSTEM

AB Stockholmshem chose urine-separating toilets because they had no experience of ecological wastewater systems and had decided, in line with the environmental profile adopted for the project, to try a new wastewater management solution. An important factor was the desire to try out urine-separating toilets in apartments for "ordinary" tenants who had not chosen their toilets themselves.



### THE CURRENT SITUATION IN THE PALSTERNACKAN ESTATE

Since 1996, all the urine collected has been transported to the farm at Lake Borsjön. In the spring of 2000, the tenants took steps to set up a tenant-

owner association with a view to managing the estate themselves.

No decision has been taken yet, but if the tenants assume ownership of the estate there is no guarantee that they will agree to bear the cost of collecting and transporting the urine in future.

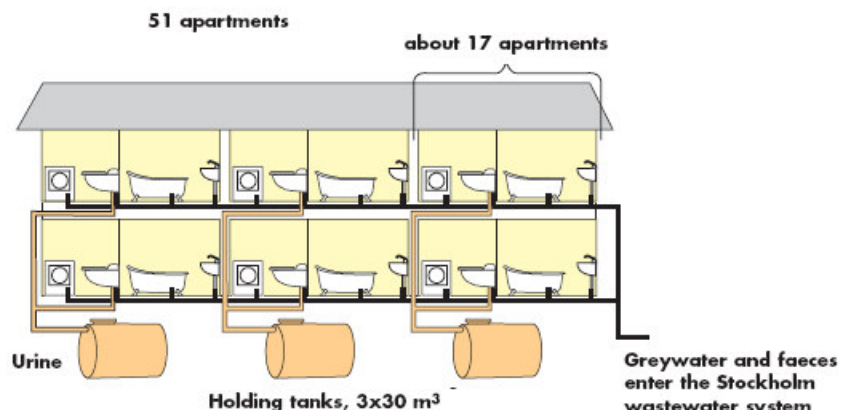


Figure 5. Diagram of the Palsternackan wastewater treatment system.  
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