

Waste - disposal

Chemical waste

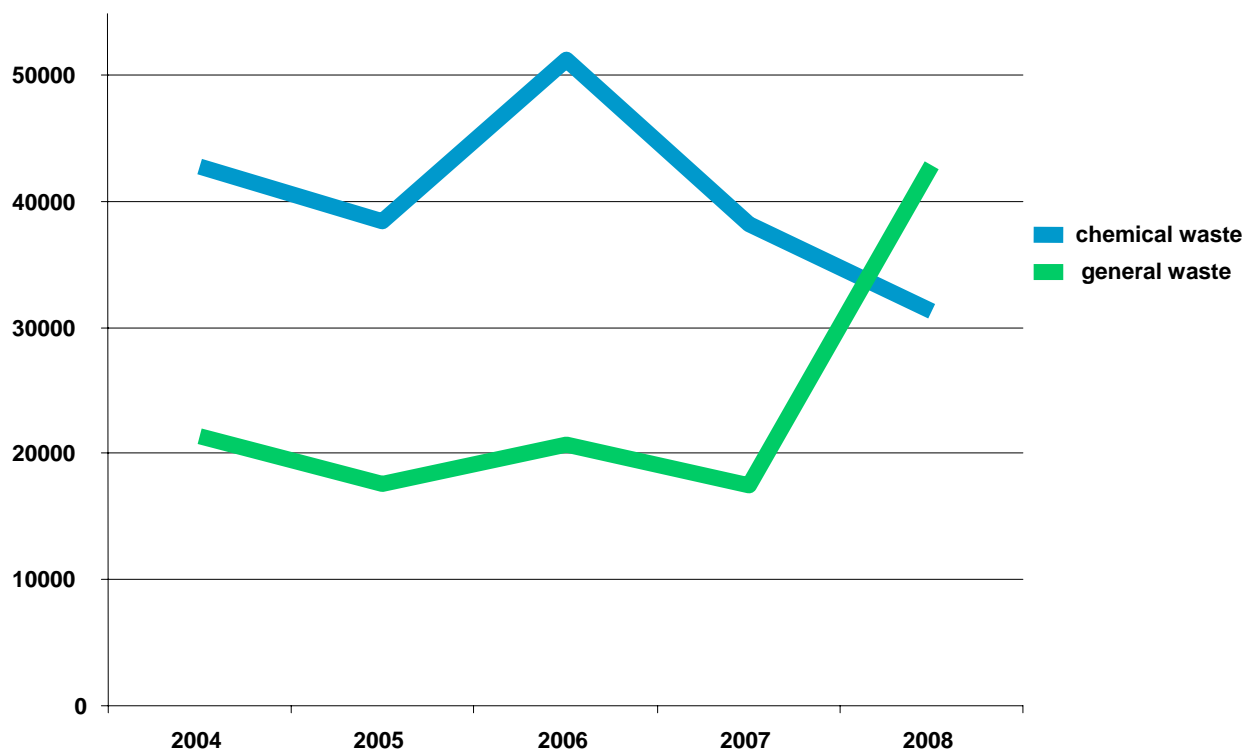
The synthesis of active pharmaceutical ingredients naturally also gives rise to secondary products, which must ultimately be disposed of as chemical waste, together with residues from the production of dosage forms. In 2008, a total of 31 295 metric tons of chemical waste were generated. As in the past the decreasing amount (- 18.0%) compared with the previous year is due to lower production volumes, in particular for Tamiflu. More than 96% of the total amount were incinerated, the rest, consisting of sewage sludge and of inert substances such as ash or slag from incineration, was landfilled. In addition, 4 940 metric tons of residual substances could be sold as valorised secondary products. Another 13 811 metric tons consisting mainly of solvents were recycled.

Responsible use of resources in the context of sustainable development also results in a reduction in quantities of waste. The success of these efforts to make better use of raw materials is clear from our performance in this respect over recent years, a 60% reduction in the quantity of chemical waste in relation to sales having been achieved since 1992.

General waste

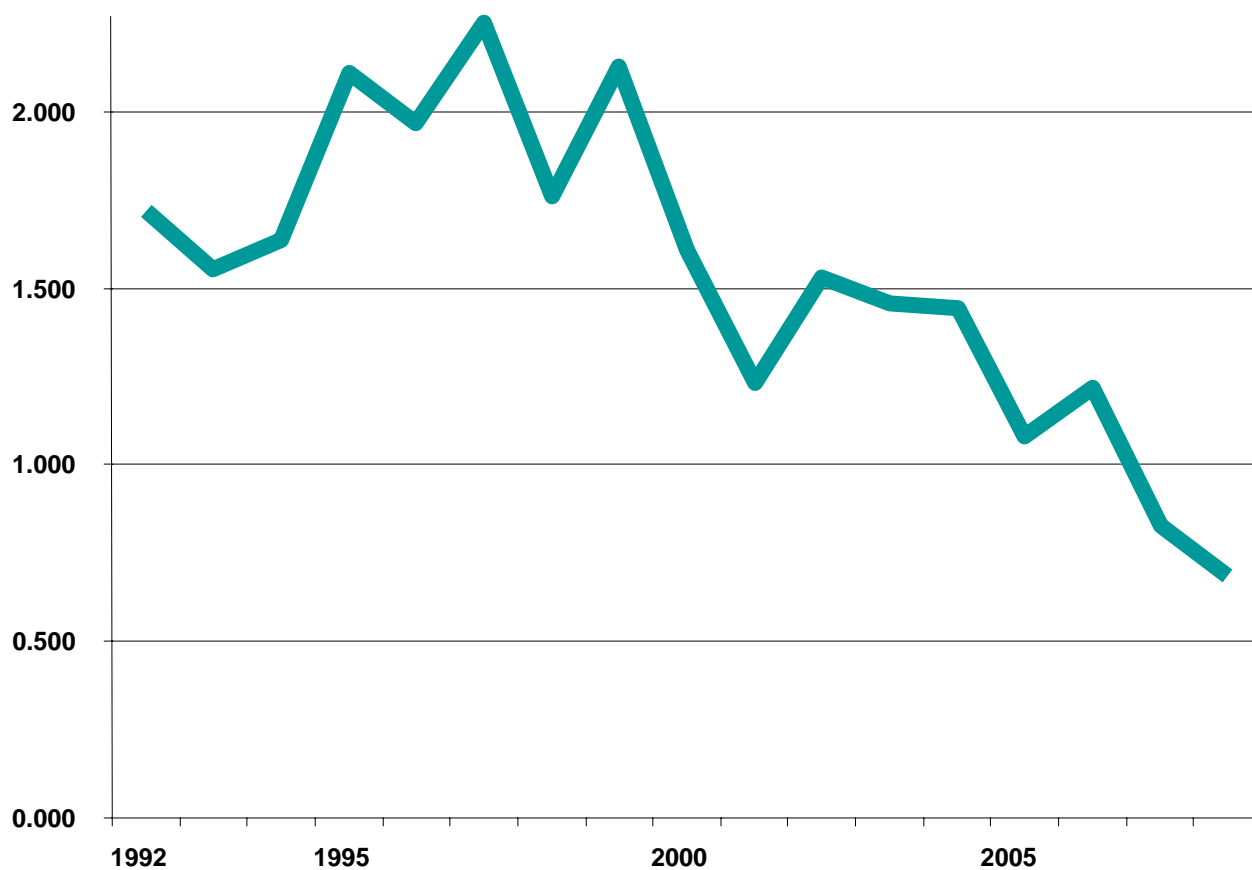
"General waste" encompasses all waste arising from activities other than chemical-pharmaceutical production and includes not only paper, cardboard, glass, plastics, wood and electronic equipment, but also construction waste. It is precisely this latter category which results in major fluctuations in the quantities arising because the construction projects which generate such waste are not carried out continuously. In 2008 several such projects including the demolition of old buildings as well as excavating the ground for new ones contributed to the total of 42 823 metric tons of general waste generated during the year. 12.1% of this amount were incinerated, the remainder being landfilled. In addition, 28 589 metric tons of residual materials were recycled.

Waste (t)



Year	2004	2005	2006	2007	2008
t chem. waste	42778	38380	51155	38167	31295
t gen. waste	21344	17604	20719	17480	42823

Chemical waste (t) per CHF 1 million sales



Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
t / CHF 1 mio	1.720	1.551	1.634	2.110	1.965	2.252	1.760	2.127	1.610	1.230	1.530	1.458	1.445	1.081
Year	2006	2007	2008											
t / CHF 1 mio	1.217	0.827	0.686											