Control of Chemical Substances

Casio exercises proper control of chemical substances in compliance with the PRTR Law and endeavors to reduce the volume of their use.

Control of Substances Subject to the PRTR Law

Regarding control of chemical substances, Casio has in place a system of environmental control organizations that are set up at sites where chemical substances are used. Built in these organizations are organizations that control chemicals. Under this system, Casio controls chemical substances that are subject to the PRTR Law and files reports as required.

At sites that use large quantities of chemical solutions, drills are held to be ready for such emergencies as chemical solution leakage.

Efforts to Reduce Quantities Used/Transferred

There has been a large increase in the quantities of PRTR-controlled chemical solutions that are used, due to a massive increase in the volumes of production at electronic component manufacturing plants. At Kochi Casio Co., Ltd., Casio Micronics Co., Ltd. and Kofu Casio Co., Ltd., efforts are under way to recycle chemical solutions (amino ethanol, hydrogen fluoride and its water-soluble salts) so as to achieve reductions.

Recycling of Used Chemical Solutions



Complete Discontinuation of Hydrochlorofluorocarbon Use

Casio set out to terminate the use of hydrochlorofluorocarbon by the end of 2004 at all of its manufacturing sites, including those of its contractors. This goal was met in March 2005 as all corporations cooperating with Casio ended the use of the substance.

Storage of PCB-containing Equipment

Casio targets to complete the proper disposal of all PCB-containing equipment by the end of fiscal 2005. Equipment that is currently included in the disposal plan consists of 19 capacitors condensers and 258 small ballast for fluorescent that were used in lighting fixtures, all of which are held at Hachioji Research and Development Center, Hamura Research and Development Center and Kofu Casio Co., Ltd.

Casio has stored these items under optimal conditions and filed reports in compliance with the law. Their disposal has been planned to mesh with prefectural plans for disposal facilities.

Casio has made reservations for disposal in Tokyo with Japan Environmental Safety Corporation to dispose of the items that are held at Hachiouji Research and Development Center and Hamura Research and Development Center, and are awaiting the startup of the treatment facilities. The items that are stored at Kofu Casio Co., Ltd. must be treated in Hokkaido because of restrictions on disposal placed by law in the Kofu region. The company is thus awaiting the completion of treatment facilities in 2007. None of Casio's overseas sites holds or controls PCB.

Complete Discontinuation of Solder containing lead

Casio used lead-free solder in its Eco electronic calculators in 1999, the first such attempt for the company. Since then, the company has worked on curtailing the use of solder containing lead. In fiscal 2003, packaging technologies that are free of solder containing lead were established in all departments, and the use of solder containing lead ended at the end of fiscal 2004. There are, however, some models that were excluded from the change, including those models that are destined for discontinued production.

Use of solder containing lead at overseas sites changed over time as shown in the following chart. However, a switch to lead-free solder was completed at the end of fiscal 2004.

Changes in the Use of Solder containing lead at Overseas Sites (Unit: ton)



(Unit: ton)

Transfers and Emissions of PRTR-controlled Substances *Column totals in the table may not add up, due to rounding errors.

FY2003 FY2004 Class 1 Designated Chemical Substance Name Amount released Amount re Amount eased ing o Quantities Recycled Amount handled Quantities Consumed Amount handled Quantities Quantities Recycled No Atmosphere Public Waters Atmosphere | Public Wat Consume 9.37 Ethylbenzene 40 1 11.71 3.55 8.16 1 2.48 6.90 below 1 ton in fiscal 2004 by reviewing used chemicals Ethylene glycol* 43 3.24 3.24 Decreasco 2 49.25 24.13 18.49 21.43 **Xvlene** 63 25.12 2 42.28 2.36 Octyl phenyl ether 308 1.18 3.15 3.15 1.18 6.53 2-ethoxyethyl acetate 101 3 16.99 6.87 10.12 3 17.17 10.64 181 15.36 0.00 23.59 Theouria 15.36 23.59 Water-soluble copper salt 207 1 16.89 0.04 16.85 1 23.98 0.01 0.04 23.92 No use within the Group as the processes that use the Toluene 227 1.47 1.47 controlled substances are contracted out Hydrogen fluoride and its water-soluble salts 283 1 13 30 0.07 2 59 10.62 1 9.60 1.92 7 68 2-amino ethano 16 29.83 0.03 0.03 29.77 36.86 0.07 0.04 1.87 34.88 2.67 75.61 41.57 2.00 94.74 155.9 36.12 169.24 27.42 2.36 42.56 Total

*Ethylene glycol exceeded 1 ton in FY2004 again because of the start-up of a new business at Casio Micronics Co., Ltd. (head office).