

Construction of water-supply pipes and sewers

A. Construction of rainfall drainage system development

By the end of 2012, 4,596 kilometers of the target length of 6,829 in the project of rainfall drainage system construction project in the urban development has completed. If the implementation rate is calculated with the ratio of actual implemented length occupied in the target length, the implementation rate for the rainfall drainage system construction in Taiwan reached 67.3% in 2012. In which, the highest rate is 96.7% in Taipei city, followed by 93.9% in Penghu County, 81.7% in Yunlin County, 79.4% in New Taipei City and 74.1% in Chiayi County. The ratio in all other counties and cities is less than 70%, needed to be improved in construction.

B. Sewage sewer construction

Sewage sewers are sewers for family and industrial sewage. The whole sewage treatment rate includes public sewage sewer available rate, special sewage sewer available rate and the implementation rate of building sewage systems. Sewage sewer construction is regarded as an important index for the urban modernization. In World Competitiveness Yearbook reported by International Institute for Management Development · Lausanne (IMD) public sewage sewer available rate was listed in life quality as one of the evaluation items. The government also treats it as the performance index of sewage sewer construction.

(1) Sewage treatment rate

By the end of 2012, the number of sewage treatment units of the country was 3,669,630 and the sewage treatment rate was 62.99% which increases 5.00% in comparison with 57.99% in 2011. The unit number of public sewage sewer was 1,870,938 (32.10% available rate) which increases 3.15% in comparison with 28.95% in 2011; 882,919 units (15.15% available rate) of special sewage sewer (in the scale of 100 units / 500 people or more in the communities and industrial districts) which increases 0.40% in comparison with 14.75% in 2011 and units with the implementation of building sewage systems are 917,713 (15.74% implementation rate) which increases 1.45% in comparison with 14.29% in 2011. In terms of the sewage treatment rate, Taipei City and New Taipei City are the highest (100.0%), followed by Kaohsiung City (77.7%), Keelung City (76.9%) Lienchiang County (74.5%), Hsinchu County (71.0%),

and Hsinchu City (63.0%); other counties and cities are not over 60%. As to the usage fee, some counties and cities have not finished the self-governance articles in charges of sewage usage. In considering the low piping coverage of sewage, only Taipei City charges to the users. Taichung City, Kaohsiung City, Taoyuan County, Chiayi County, Pingtung County, and Keelung City charge to the users in Industry Park, only. Other counties and cities do not charge for it. The usage fee in 2012 was 1,264,273,000 dollars which increased 17.64% compared with that in 2011 and the CMY was 1,074,760,000 tons, which increased 1.14% compared with that in 2011. In which, the CMY in New Taipei City (363,880,000 tons) is the highest, followed by Taipei City (335,440,000 tons) and Kaohsiung City (240,620,000 tons).

(2) Expense of sewage sewer construction

The sewage sewer is urban public construction. The construction period is long and the investment is large. Therefore, the government must invest more than 10 billions in it every year. The construction expense comes from the government and the folk. As for the part of the government, the expense will be processed from the public budget planned by central government and local government.

The total expense of sewage sewer construction was 15,143,230,000 dollars in 2012, indicating a decrease ratio of 12.1% and budget decrement of 2,089,865,000 dollars over the previous year (2011); the highest expense was 14,290,934,000 dollars (94.4%) of construction fee, followed by 385,921,000 dollars (2.5%) of land fee and 363,338,000 dollars (2.4%) of planning fee. In terms of geological location, the expense of Taichung City, 2,431,554,000 dollars, was the highest, and was followed by 2,234,459,000 dollars for New Taipei City, and 2,211,863,000 dollars for Kaohsiung City.

(3) Sewage sewer system management fee

The sewage sewer system management fee in 2012 was 3,252,660,000 dollars which increases 18.8% (514,677,000 dollars) in comparison with 2,737,983,000 dollars in previous year (2011); the highest expense was 1,141,020,000 dollars (35.1%) of electricity. followed by 711,639,000 dollars (21.9%) for personnel, and 450,463,000 dollars of maintenance (13.8%). When

compared with that of previous year (2011), the fees of equipments and facilities has the biggest increase ratio of 48.5%, followed by 35.0%.of electricity.

(4) Sewage sewer pipes and facilities

The planned length of sewage sewer pipe diameter 600mm or above was 1,338,694 meters till the end of 2012 and 870,010 meters had been constructed. The planned length of pipe diameter 300mm – 600mm was 3,573,431 meters and 2,198,450 meters had been constructed. The planned length of sewage sewer pipe diameter below 300mm was 4,200,190 meters and 3,970,861 meters had been constructed. In terms of sewage treatment facilities, the planned wastewater treatment plants was 228 till the end of 2012 and 64 had been constructed. The planned pumping stations were 261 and 168 had been constructed. The planned interceptor station were 126 and 98 stations had been constructed.