4.2 UTILITY SYSTEMS continued

4.2a Ground Water and Municipal Water Systems continued

become a reality. This amount is in addition to current excess over withdrawal rights.

In summary: 1) The City of Carlsbad will require an additional 2,295 acre feet per year, on the average, should the WIPP project become a reality. Of this amount approximately 703 acre feet per year are directly attributable to the WIPP project. 2) The City has adequate water rights to supply additional water. 3) The City has adequate well field to produce additional water. 4) The location of water rights and well field capacity serves as a constraint for production of adequate amounts of water to serve increased population.

4.2b Wastewater Treatment

Estimates were made of the number of millions of gallons per day of discharge associated with the population increase in Carlsbad with and without the WIPP project. It was estimated that an additional flow of 0.175 million gallons per day could be attributed to the population increase associated with primary and secondary employment resulting from the WIPP project.

A major capital improvements program for wastewater treatment is anticipated. Thus, processing requirements of volumes associated with the WIPP project will not be problematic. In 1982, when the new plant is scheduled to begin operation, it will be operating at approximately one-half of capacity.

4.3 LAW ENFORCEMENT AND FIRE PROTECTION

Estimates were made of the increased personnel in law enforcement and .

fire protection required to maintain the existing ratio of personnel per