SECTION 7.0
RATIONAL FOR SELECTING SECOND PRIORITY CONTROL ALTERNATIVES

7.1 GENERAL

The various levels of control examined for each of the three Water Pollution Control Centres to this point in the study are based on meeting the following effluent ammonia targets:

Level of Control	NEWPCC		SEWPCC		WEWPCC	
	Summer	Spring	Summer	Spring	Summer	Spring
Best Practicable Level of Control	2 mg/L	6 mg/L	2 mg/L	6 mg/L	2 mg/L	6 mg/L
Centrate Treatment	17 mg/L	17 mg/L	N/A	N/A	N/A	N/A

N/A – Not applicable

For the NEWPCC and SEWPCC, the foregoing levels of control provide a good indication of the requirements to provide a level of ammonia control at the two ends of the possible spectrum. For the NEWPCC, the centrate treatment alternative provides one intermediate point in the spectrum. In order to provide an indication of the requirements at some of additional intermediate levels of control, it was decided to study two additional levels of control as follows:

- A high level of control where the target effluent ammonia concentration would be 8 mg/L in the summer.
- A modest level of control where the target effluent ammonia concentration would be 14 mg/L in the summer.

For the WEWPCC, optimization of the existing facilities using the existing lagoons is projected to achieve an effluent ammonia concentration of 15 mg/L. Therefore, one additional intermediate point, the high level of control (8 mg/L in the summer) was selected for further examination.

In all cases, it is assumed that a seasonal variation in ammonia concentration above the summer limit would be acceptable with the spring time limit being three times as high as the summer limit.