advanced wastewater treatment providing the option of re-using This report is designed to identify business opportunities in Australian wastewater treatment, and sewage sludge handling and treatment, to assist Canadian companies to identify areas of opportunity in Australia, to evaluate prospects for business in those areas, and to assess the benefits from expected marketing expenditures.

## 1.1 Background

Most of the Australian population of 16.7 million lives in the southern and central coastal regions of eastern Australia abutting Bass Strait and the Tasman Sea in the south (Vic and southern NSW), and the South Pacific Ocean in the centre (central and northern NSW and southern Qld).

Within this region lie the metropolitan areas of Sydney (NSW) and Melbourne (Vic) with populations served by sewerage, of 3.7 and 2.5 million respectively.

The areas of non-metropolitan New South Wales and Queensland included are found on the coastline which is subject to rapid development and consequent pressures on available resources. Included are one water board (Hunter, 100 miles north of Sydney); three city governments (Coffs Harbour in northern NSW; Gold Coast and Caloundra in Qld); and 6 shires (4 in NSW and 2 in Qld).

The non-metropolitan areas of Victoria addressed in this report sewerage services by 142 local councils and water boards.

Recent events and ongoing trends in the focus region have created a climate in which environmental aspects of wastewater treatment and sewage sludge handling and disposal have come under close scrutiny by the public and governments.

The catalyst has been an ongoing series of public revelations of the contamination of Sydney's ocean bathing beaches by primarytreated liquid effluent (1,183 million litres/day [ML/d] in dry weather) accompanied by poorly-screened floatables and undigested sludge from cliff-face ocean outfalls. Subsequent investigations have detected viral contamination of bathing waters and accumulations of heavy metals and organochlorines in marine species as far up the food-chain as fish taken by anglers near the outfalls.

Public and political response has been supportive of more environmentally benign treatment and disposal alternatives for wastewater and sludge than those now in use.