

3836327 ENTM/M : MAJOR : TECHNOLOGY OF ENVIRONMENTAL MANAGEMENT ;
M.Sc. (TECHNOLOGY OF ENVIRONMENTAL MANAGEMENT)

KEY WORD : SOLID WASTE / PRIVATE SECTOR / OPERATION

DUANGNATE KEAWRUM : THE STUDY ON THE SOLID WASTE AND
DISPOSAL MANAGEMENT OF PRIVATE SECTOR A CASE STUDY OF THE CONTRACT-
OUT FOR SANITARY LANDFILL IN BANGKOK METROPOLITAN ADMINISTRATION.

THESIS ADVISOR : SUCHART NAWAGAWONG, M.Sc., SUTTHINAN NANTHAJIT,
M.Sc., MALEEWAN PONGSAWASDI, M.Sc., 147 p. ISBN 974-589-511-3

The objective of the study is to study the operation of solid waste disposal management by using linear programming to analyse the operation of disposal management systems of private firms that have contracts with Bangkok Metropolitan Administration. These firms operate with the objective of managing solid waste as efficiently as possible in order to minimize expenses. The private firms are Group 79 Co., Ltd. and Wasduphan Turakit Co., Ltd.. The results of the study are revealed as follow ;

1. Linear programming analysis showed that in 1997 the minimum expense of solid waste management for Group 79 Co., Ltd. was 64,732,290 baht while managing 706,133 tons or 1,935 tons per day of solid waste. The minimum expense for Wasduphan Turakit Co., Ltd. was 73,777,160 baht while managing 711,455 tons or 1,949 tons per day solid waste.

2. Linear programming analysis showed that the minimum expense of solid waste transportation for Group 79 Co., Ltd. was 67,831 baht per day, with 1,935 tons per day of the solid waste which was transported by semi-trailer 47 times per day and full-trailer 6 times per day. The minimum expense of solid waste transportation for Wasduphan Turakit Co., Ltd. was 104,146 baht per day, with 1,949 tons per day which was transported by semi-trailer 52 times per day and full-trailer 3 times per day.