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PROJECT TITLE

DEINKING PROCESSES AND DEINKABILITY
OF RECYCLED NEWSPRINT

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ABSTRACT

CHAPTER ONE

INTRODUCTION

This manuscript reviews the recycling of newsprint for deinking and the deinkability of it. Sodium hydroxide was used as the sole deinking chemical at laboratory scale and the washing process on a sidehill model was employed. The deinked pulp was incorporated into a newsprint furnish for the production of newsprint again. The optical and strength properties turned out to be comparable to those of the standard newsprint that was currently manufactured at Mutare Board and Paper Mills (MBPM).

The best addition level of sodium hydroxide for deinking was found to be 1.5%. From the assessment of the availability of newsprint that could be recycled within Zimbabwe, a furnish of 20% and 25% deinked pulp blended with groundwood (gwd) and fully bleached softwood (FBSW) was developed. There was a possible saving of 5% of the imported fully bleached softwood pulp. With MBPM having some idle equipment and structures, the project of deinking could be a viable undertaking. However, detailed economic and technical feasibility studies were recommended to be carried out with a pilot plant.