

# ABSTRACT

WILLIAM S. M'COY. Use of The Flavor Profile Method To Solve Taste and Odor Problems In Water Supplies. (Under the Direction of DR. FRANCIS A. DIGIANO)

The Flavor Profile Method (FPM) was evaluated for use as a practical tool to aid water managers in controlling taste and odor in water supplies. A sensory panel using students was organized and trained. Water samples from throughout the Orange Water and Sewer Authority water system were analyzed by the sensory panel using the FPM.

The FPM is useful in investigating the source of taste and odor problems and in monitoring the effectiveness of treatment processes in removing tastes and odors. The FPM is effective in eliminating the influence of outside odors on the results. A trained sensory panel using the FPM is able to detect presence of musty and chlorinous odorants in water samples in concentrations above a threshold value. Results from the sensory analysis of samples indicate an enhancement of the chlorinous flavor intensity in samples that were chlorinated with a musty odorant present.