Acknowledgements:

Our project could not have been possible without the help and efforts of several individuals. From the first stages of our project, all the way to the final number crunching of our data, we received vital and important help.

We would first like to thank Mr. Thiel, our Advanced Placement Biology teacher, for giving us support and input throughout our project. During times of difficulty, he gave us essential support to push us to strive even further.

Some of the most important help we received on this project was through our last year’s Advanced Placement Chemistry teacher, Mrs. De Boer. She was the one that gave us the contact number for Dr. Joy Andrews at Cal State Hayward, as well crucial advice throughout the early stages in developing our research topic.

Our main mentor was Dr. Joy Andrews Professor of Environmental Chemistry, at Cal State University at Hayward. She gave us the initial idea to develop a project, she provided us with vital information and guidance concerning our research. We would also like to thank her for allowing us use of her research laboratory at Cal State Hayward, as well as access to the lab equipment and materials.

As we developed our project, one of the major obstacles was devising an experimental design that would prevent the volatilization of MTBE. We received important advice in this area from chemists at the Clorox Company R&D facility in Pleasanton. One of the members of our research team, Ryan Hoshi, through an internship program at Clorox, was able to consult with chemists we worked with. We would like to thank Jennifer Julian, Maria Gaia, and Brian Cartwright for giving us input and ideas about our project. We would especially like to thank, Dr. Glenn Smith, who provided us with different methods of developing our standard curve through running the GC/MS machine at Hayward. He also gave important counseling in designing the logistics of our experimental design. In addition to, we would like to thank the Clorox Company for providing us with the 500 cc amber chemical bottles needed in constructing our apparatus.

Most of the work and experimentation for our project occurred in Chemistry Department at Cal State University at Hayward. We would like to once again thank Dr. Andrews, as well as the Cal State Hayward College of Letters and Sciences for allowing us use of equipment and lab materials. Key equipment and materials used in our project was the use of Cal State Hayward’s gas chromatography mass spectrometry machine, humidity temperature control chamber, analytical balances, source of MTBE and other chemical solvents and use of the research laboratory.

We would also like to thank our Advanced Placement Statistics teacher, Mrs. Nash, for helping us extrapolate our data. Also, we would also like to thank Jeff Smith, and undergraduate student of chemistry at Cal State Hayward for helping us with the statistical analysis of our data.

We owe our greatest thanks and appreciation to Christian Thomas, an undergraduate student of chemistry at Cal State Hayward. In reality, our project could not have been made possible without his exhausted efforts and commitment to helping us. He also served as a mentor for our project and gave us the moral support needed to finish our experiment. He helped us better understand the equipment needed in our experiment, such as the theories and concepts behind the use of the GC/MS machine. Christian, being a student of chemistry, was able to help us further understand the chemical properties of MTBE. His input was also vital in devising our experimental apparatus, the THP bottle. (Thomas-Hoshi-Patel bottle), as well as devising a method off sampling on the GC/MS machine.