INTEROFFICE MEMORANDUM

TO: PROFESSOR ARCHIBALD

FROM: NICHOLAS KENNE

SUBJECT: ENGR 115

DATE: 11/11/19

Purpose:

The purpose of this memo is to describe my experience from our lab trip to the Schatz Energy Research Center (SERC) and the Campus Center for Appropriate Technology (CCAT).

Discussion:

The purpose of this these tours was to become more familiar with some of organizations on campus that may be of interest and value to us as students of environmental engineering. SERC and CCAT may have opportunities for students to get hands on experience with engineering projects.

During the tour of SERC, we were told about the research center's solar energy project. Schatz helps to engineer improved solar powered light sources for rural parts of the world where safe and effective lighting is not easily attained; we were told that a large portion people still use kerosene lamps which are not as bright, safe, or sustainable as solar powered lamps.

I believe that this project could help people see the value in using solar energy to power more of their items, hopefully pushing society as a whole into a more environmentally sustainable direction. However, a concern that I have is whether solar powered lights are more sustainable and ethical than kerosene lamps after considering all factors such as cost of materials and labor, source and method of material extraction, net greenhouse gas production, proper disposal of electronic/metallic waste, etc.

Once I am a bit further into my ERE degree and have some more classes under my belt, I would love to work at SERC. All of their work sounds very interesting to me, especially the solar energy and off-shore wind energy projects. The most interesting part of the trip for me was learning about the off-shore wind projects because this is a source of clean energy that I am rather uneducated about.

Conclusion:

In summary, the trip to CCAT and CERC was informative and provided me with further motivation to pursue my degree in ERE.