

Memorandum

TO: DR. CASHMAN

FROM: MARIA ANGELICA GARCIA

CC: ARCATA WASTEWATER TREATMENT PLANT FIELD TRIP

DATE: 09/29/16

Purpose:

This memo serves to explore the different topics covered on the Arcata Wastewater Treatment Plant field trip held on the 29th of September 2016 at 2 p.m. and to offer my personal response to the information shared on the tour.

Discussion:

The trip to the Arcata Wastewater Treatment Plant (AWWTP) provided a myriad of different facts that are necessary to engineers and understanding wastewater treatment processes. I truly enjoyed touring the grounds because being able to physically see what was discussed in lecture made the wastewater treatment process real rather than just a diagram on a piece of paper. I found walking through the process to be more educational than any picture in a textbook and I feel that watching the processes in action helped me to better fully understand the wastewater treatment process.

A few things I found to be most interesting at the AWWTP was learning about the marsh construction process as well as learning about the plant's transition from using chlorine to disinfect to using UV rays instead. Normally I would not think that there is much other than letting nature take its course when it comes to constructing a marsh, so learning about all the difficulties the AWWTP ran into, such as the birds completely diminishing all the plants was really eye-opening as to the type of skills of being able to foresee future issues engineers have to have. Likewise, I found the explanation of why the AWWTP is transitioning to using UV disinfection methods to be really enlightening of the environmental repercussions of even trying to treat water to protect the environment could have. Overall, I really appreciated how passionate the AWWTP representative, Thea, was about the plant and telling us about all the detail and plant operations.

Finally, I really enjoyed seeing how the AWWTP has been able to restore the marsh thus far from all the damaged that was done so many years ago. I think that the progress that has been made is very inspiring as to what can be done if effort and thought is actually put into an idea.

Conclusion:

The AWWTP provides not only the water treatment processes of Arcata's water, but also a valuable resource to engineers and their ability to learn and develop critical thinking skills.