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MEMORANDUM

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TO: Eileen Cashman  
FROM: Mason Davidson  
SUBJECT: ARCATA MARSH WASTEWATER TREATMENT PLANT TRIP  
DATE: OCTOBER 6, 2016

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#### Purpose

The purpose of this memorandum is to explain the things that I learned during the trip to the Arcata Wastewater Treatment Plant on September 29, 2016.

#### Discussion

Visiting the Arcata Wastewater treatment plant was an excellent experience that gave me the opportunity to see the process of how wastewater is treated. Thea, the treatment plant operator walked us around the plant and showed us the marshes and the oxidation ponds.

I was informed on what all happens to the sludge after it is collected from the bottom of the primary settling tanks. What happens is it goes to a digester where it is monitored in an anaerobic environment. I found it interesting that it is also used as a secondary settling tank because I always wondered where all of the waste water went when they cleaned the main tank.

I also was interested in what all happens when the water flows to the oxidation ponds and the marshes. I now understand how complicated the designs of an engineer's project can be especially after seeing the complex hydrology involved.

#### Conclusion

Overall, the trip to the Arcata Wastewater Treatment Plant furthered my understanding of what kind of things engineers need to think about while they are in the design process of their projects. It also showed how engineers projects don't always go exactly how they plan and that problems can come up later after they project is constructed.