

## Victor Delgado

Civil Engineering

Delgado.VictorAlfonso@gmail.com

### Introduction

The California Regional Water Quality Control Board, San Diego Region, is a state regulatory agency whose purpose is to preserve, enhance and restore the quality of California's water resources, and to ensure their proper allocation and efficient use.

The San Diego Water Board regulates discharges of waste to waters of the United States and waters of the State. The San Diego Water Board's jurisdiction includes a large portion of San Diego County, portions of south Orange County, and the southwestern portion of Riverside County.



The California Regional Water Quality Control Board, Region 9 - San Diego

### Background

Here in the San Diego Region, I was able to work and meet many professionals from different degrees/fields.

For example, Michelle Mata, my supervisor is an Environmental Engineer and Brian Kelley, Michelle's supervisor, is a Chemical Engineer.

I also worked with Civil, Environmental, and Geotechnical Engineers, as well as, Chemist and Biologists.

The Core Regulatory Unit is the unit I worked for. It was comprised of 6 engineers and 3 student assistants, including myself.

*Most of the time my office was surrounded with reports that arrived on a daily basis from over 20 different facilities.*



There are many units and all of them play an essential role in keeping our waters clean and safe.

The facilities that we monitor range from water districts, power plants, water parks, and any other company or organization that discharges waste or plans to discharge waste to waters of the US or waters of the State.

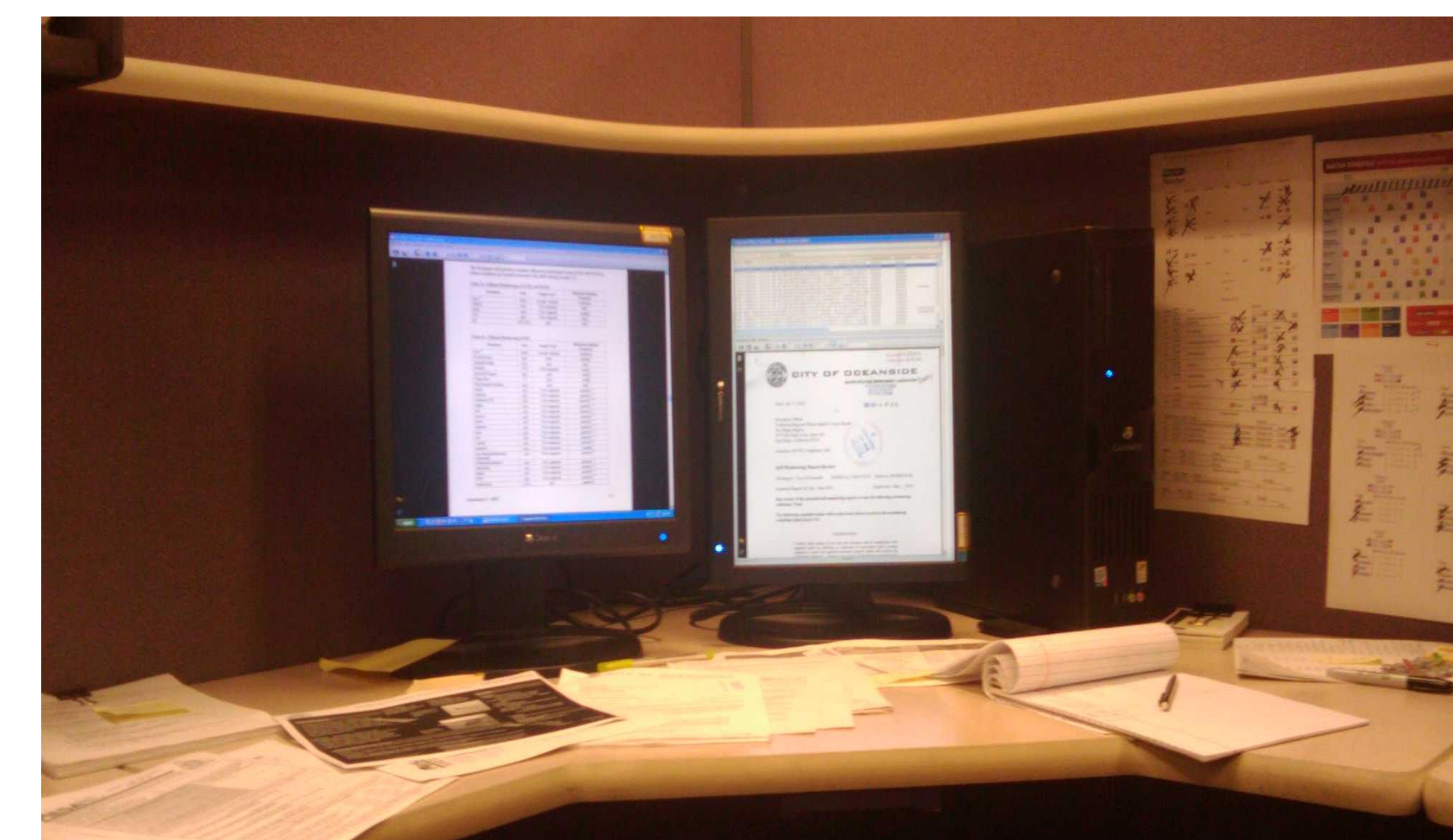


Bookshelf full of reports, reference texts, and other important data.

### Methods & Results

One of my duties was to review reports to ensure that the organizations we regulate were monitoring and analyzing the waste they discharge according to their individual permits.

The individual permits addressed the proper levels of constituents that are permitted in order to avoid pollution or any harm to our ecosystem. Some of these constituents include: Residual Chlorine, pH, Enterococcus, Ammonia, and even Copper.



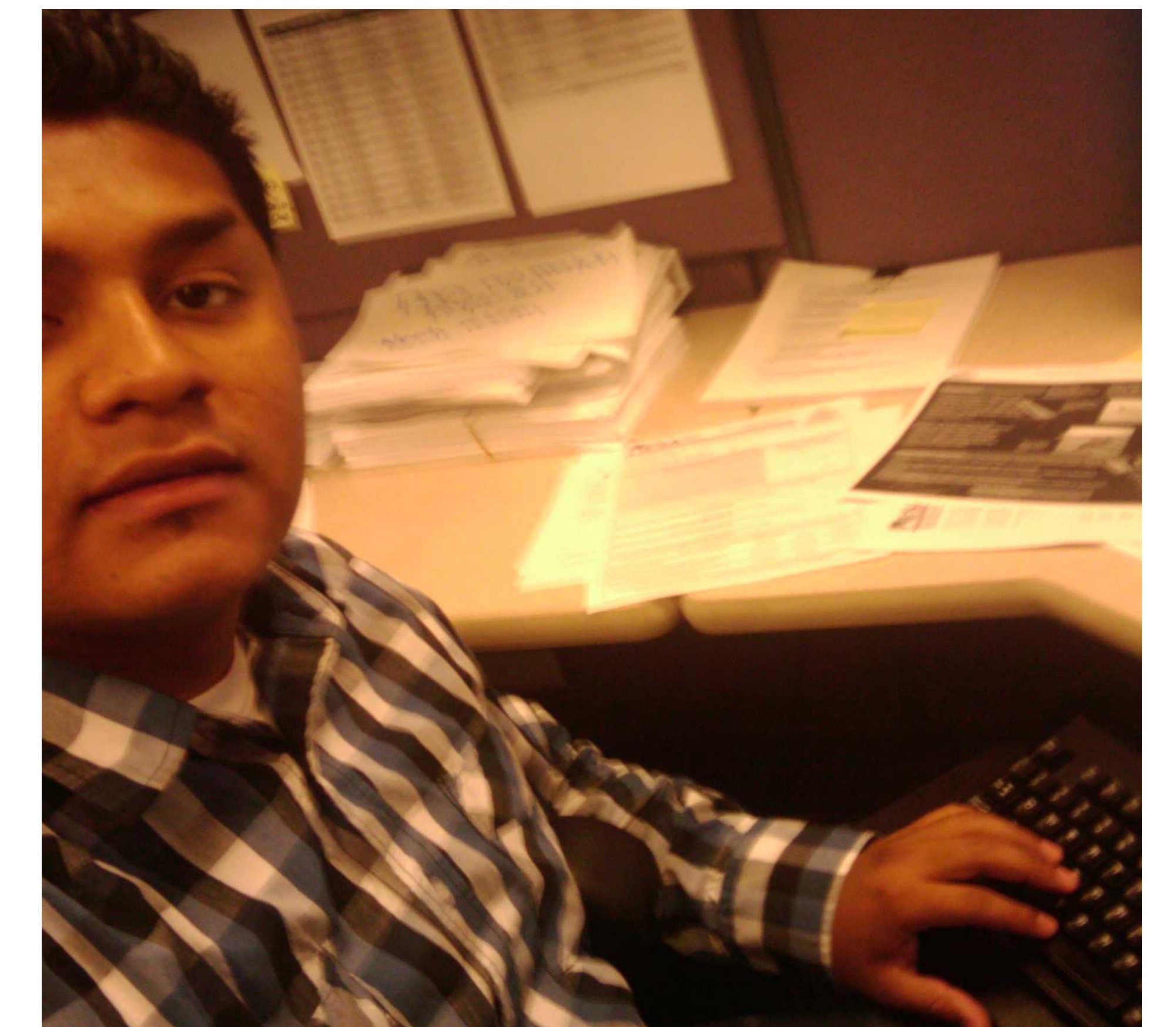
*This was one of my favorite parts of my job, the dual monitors. When I had a lot of files work with at the same time, the dual monitors helped me multitask.*

If any of the above mentioned go over or are below their respective limits the San Diego Water Board had the power to fine them and pursue any necessary corrective actions. I also helped write "Enforcement Letters" which addressed any violations we found or comments we had. If any company failed to follow their permit we had the power to pursue legal actions enforced by the State of California. By doing this the companies are forced to be honest and help protect our waters under penalty of perjury.

Every permit required a different type of monitoring. They varied from continuous, daily, weekly, monthly, quarterly, semiannually, annually, and in some cases the monitoring is required every 4-5 years. This was determined by the engineers.

### Conclusion

From reviewing reports and learning about the purpose of the San Diego Water Board I was able to learn and understand what an important role we play in ensuring that our planet continues to live and protect our most precious natural resource -- water.



*I enjoyed the opportunity of working with all types of professionals and experiencing having my own office. I would like to continue my work with the California Water Board.*

### Acknowledgements

I would like to thank the National Science Foundation.

I would also like to thank Michelle Mata for all the help, patience, and experience she gave me and the California Regional Water Quality Control Board for allowing me to work with them this summer.

Finally, I would like to thank all of the MESA Staff and Directors for helping me grow as a professional and helping me find this great opportunity. Thank you.