

ENV 4417: WATER QUALITY & TREATMENT
Department of Civil & Environmental Engineering
University of South Florida

Semester Project
Stage 3

Prof J A Cunningham
Fall 2015

Due date: Tuesday, October 6, at the beginning of class.

Visit your treatment plant. Meet with a plant operator, plant supervisor, or other appropriate representative of your treatment plant. Have him/her show you around the treatment plant and explain the treatment train to you. Have the plant representative fill out the following information, then turn in this form on October 6:

Name and/or location of treatment plant: _____

Name of plant representative: _____

Job title of plant representative: _____

Date of site visit: _____

Names of students who visited plant: _____

Signature of plant representative: _____

After the site visit, write up a summary of some of the main things that you learned, and turn it in with this form on October 6. It is OK to put it in bullet-point format if you wish, i.e., it needn't be written in complete sentences. Some of the things you might try to learn during your visit are:

- If it is a drinking water plant, what is the source of the water?
- If it is a wastewater plant, to where is the wastewater discharged after treatment?
- What is the design flow rate or capacity of the treatment plant (e.g., in mgd)?
- At what flow rate does the treatment plant typically operate? (might differ from the design)
- About how many customers are served by the treatment plant?
- In what year did the treatment plant go on-line? Have there been any major changes or expansions since it first went on-line?
- What are the most important processes in the treatment train? Can you draw a sketch of the treatment train?
- Does the plant operate around-the-clock or only intermittently? How many operators are typically on shift at any given time?

- Are there any processes at this plant that are unique or different from other treatment plants in the area? What is the reason for employing those unique/different processes?
- What works particularly well at this plant? What gives operators the biggest headaches?

It needn't be *exactly* these questions – this was just the list that I thought I might ask if I were, say, interviewing a plant operator and wanted to learn about his/her treatment plant. You might come up with your own questions or items that you found interesting, and that is fine. The point of this assignment is to get you to visit the plant and to start getting familiar with its purpose, history, and operation.