

ENV 6438: Physical & Chemical Processes for Drinking Water Treatment
Department of Civil & Environmental Engineering
University of South Florida

Cunningham

Spring 2020

Semester Project

Due Wednesday, January 29

Stage 1

1. Form a group. Probably the group size will be two or three students. If enrollment in the class is high, I might need to insist that groups contain at least three students; if enrollment is low, I might need to cap the group size at three or possibly even two. Ideally we will have about 4–6 groups ... I could live with up to 8 groups if the class enrollment is very large, but I'd prefer 4–6 groups.

2. Decide on a question that you want to answer for your project this semester. The question should:
 - be related to the general class subject of drinking water treatment;
 - interest you and motivate you to learn more; and
 - be something you can answer this semester based on reading relevant books, articles, and relevant materials; but
 - not have an obvious answer that could be provided without independent research; and
 - *not* have a clear “right” or “wrong” answer, but rather leave room for your own interpretation or conclusion based on the available information and evidence.

For instance, I think any of the following questions would be appropriate:

- Should the US EPA promulgate a Maximum Contaminant Level for perchlorate, and if so, at what concentration should the MCL be set?
- Do pharmaceutical compounds in drinking water represent a significant threat to public health in the U.S.? Why or why not?
- Which chemical that is not currently regulated by the EPA under the Safe Drinking Water Act should be at the top of the Contaminant Candidate List, and why?
- What bacterial species is the best indicator of fecal contamination of drinking water, and why?
- Which chemical disinfectant (or combination of disinfectants) is the best choice for treatment of surface water, and why?

These are just a few examples. You should decide on a question that interests you personally.

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8. Each group should turn in one hard copy of page 2 of this form after it is completed.

This assignment will comprise 5% of your overall project grade – it is possibly the easiest 5 points you will get all semester, so please complete it and turn it in!