CEE 697J Semester Assignment

Here is what we're looking for in the semester assignment for CEE 697J

1. Select a topic that pertains to small systems. This could be a treatment technology that is mostly used in small systems (e.g., bag filters), a treatment technology that is used in systems of all sizes but is appropriate for small systems (e.g., oxidation ponds), or some other issue or practice that is not a "technology" but is important to small systems (e.g., maintaining regulatory compliance).
2. Prepare a bibliography on this topic. About 10-20 papers if at all possible. Please include the full citation, some notes on why the paper might be important (just a few phrases) and the abstract from the article itself or web-of-science. Please tabulate (see example below), send me the table by email and all of the papers in pdf form.
3. Prepare and present a critique on one of the papers from #3 above. For your critique, you will want to select from this biblio. Please feel free to present the critique to the class in an informal way, just showing the pdf on the screen without preparing any powerpoint slides.

Biblio example table:

Citation	Notes	Abstract
Alsheyab, M., Jiang, J.Q. and Stanford, C. (2009) On-line production of ferrate with an electrochemical method and its potential application for wastewater treatment - A review.Journal of Environmental Management 90(3), 1350-1356.	Best review to date on ferrate production, does not include some of the new chemical methods	A number of studies on the oxidation of various organic/inorganic contaminants by ferrate(VI) were reported in the 1980s and 1990s. The exploration of the use of ferrate(VI) for water and wastewater treatment has been well addressed recently. However, challenges have existed for the implementation of ferrate(VI) technology in practice due to the instability of a ferrate solution or high production cost of solid ferrate products. The research has been carried out aiming at the generation and application of ferrate(VI) in situ. This paper thus reviews ferrate chemistry and its overall performance as a water treatment chemical, discusses the factors affecting the fer-rate yield efficiency using the electrochemical method, and finally, summarises the work on the production and use of ferrate in situ which is currently under study.