FAMU – FSU COLLEGE OF ENGINEERING
DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING
2525 Pottsdamer Street
Tallahassee, Florida

Tag Meeting No. 2
Thursday, August 20
2:00 – 4:30, Room B202

MINUTES OF MEETING

Project Title: Usage of Water-Filled Trench in Improving Groundwater Quality
Tag Members: Lee Martin, Peter Grasel, Casey Taylor, Jim Langenbach, Subramanian Ramakrishnan, Michael Watts, and Clayton Clark
Principle Investigators: Gang Chen, Amy Chan Hilton, and Kamal Tawfiq

In attendance: Rhonda Rogers-Bardsley, Lee Martin, Peter Grasel, Michael Watts, Clayton Clark, Kamal Tawfiq, Gang Chen, Amy B. Chan Hilton, Sandip Patil and Jim Langenbach (via teleconference call).

Agenda

1. Project Overview — presented by Gang Chen (Detailed information will be available at http://www.eng.fsu.edu/~gchen/index_files/Page956.htm)

2. Removal of TCE, benzene, toluene and xylene through vaporization
— conducted by Pawan Kumar Subramaniam

3. Removal of TCE, benzene, toluene and xylene through biodegradation
— conducted by Pawan Kumar Subramaniam

4. Removal of iron through filtration
— conducted by Pawan Kumar Subramaniam

4. Iron reduction and adsorption on *Shewanella putrefaciens*
— conducted by Pawan Kumar Subramaniam

5. Publications through this project
Part of this work is scheduled to be presented at the following meetings. The sponsorship from Hinkley Center for Solid and Hazardous Waste Management for this project will be been acknowledged.

Subramaniam, P. K., Iron Reduction and Adsorption on *Shewanella putrefaciens* nearby Landfills in Northwest Florida, Ninety-Fifth Annual ASM Southeastern Branch Conference, November 6-7, 2009, Savannah, Georgia.

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A journal paper is in preparation to be submitted, which is focused on iron reduction and adsorption on *Shewanella putrefaciens*. The sponsorship from Hinkley Center for Solid and Hazardous Waste Management for this project will be been acknowledged accordingly.

6. Potential funding sources for the continuation of related research
— NSF CBET

7. Discussion

The TAG members raised the question regarding the separation of BTEX and PCE removal by sorption from that of biodegradation.

The TAG members all agreed that the dominating mechanism during biofiltration was likely to be through adsorption since the duration of the filtration process was around 2 hours and less than 5% of BTEX can be degraded within this period of time based on previous results.

The discussion on the separation of these two mechanisms should be included in the final report.

8. Website Development
A website has been developed for this research (www.eng.fsu.edu/~gchen). All the information regarding this project is uploaded to this site to facilitate the dissemination of the research discovery.

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