

Plant Uptake And Degradation Of Process Chemicals And Hydrocarbons

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This project is based on the observed success of natural wetlands at reducing the mobility and concentration of petroleum hydrocarbon contamination. The question was then proposed – can a constructed, or engineered, wetland work in a similar fashion to treat hydrocarbon contaminated groundwater? If so, is it economical? Mechanical treatment typically involves pumping petroleum-contaminated groundwater from extraction wells and then running it through an air stripper to remove the hydrocarbons. This stripping method can be expensive to operate and may require considerable maintenance because of iron and carbonate build up.

1. Increase water flow rate to the wetland to full scale operation, and evaluate mass removal efficiency during year round operation;
2. Monitor effect of plant growth and removal efficiency;
3. Assess economics of the wetlands; and,

4. Publish findings in a scientific publication.

2002_Constructed Wetlands for Hydrocarbon Removal ERAC
Update

2002 Komex_Wetlands_Field Update Presentation