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UST CONSTRUCTION WATER MANAGEMENT

November 20, 2015

Take Home Message

1) Don’t ever discharge water from a construction site, especially a UST site without a permit

2) If you discharge contaminated water or direct someone to, you could go to prison

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To protect our Employees, Company, Communities, and the Environment

- Water discharge training program (annual refresher)

- Water discharge policy (reviewed and signed by all)

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Activities at UST sites in which water contamination may be encountered

- Tank pit construction or removal
- Tank and line repairs
- UST and dispenser access and repairs
- UST buoyancy management

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Levels of Groundwater Contamination

- **Extreme High**- Free Product or sheen observed on water surface
- **High/Medium**- Water has strong odor, but no product or sheen is present
- **Medium/Low**- Water has no odor and no product or sheen, but laboratory tests confirm contamination

- Any type of water contamination is serious and should be handled and managed appropriately

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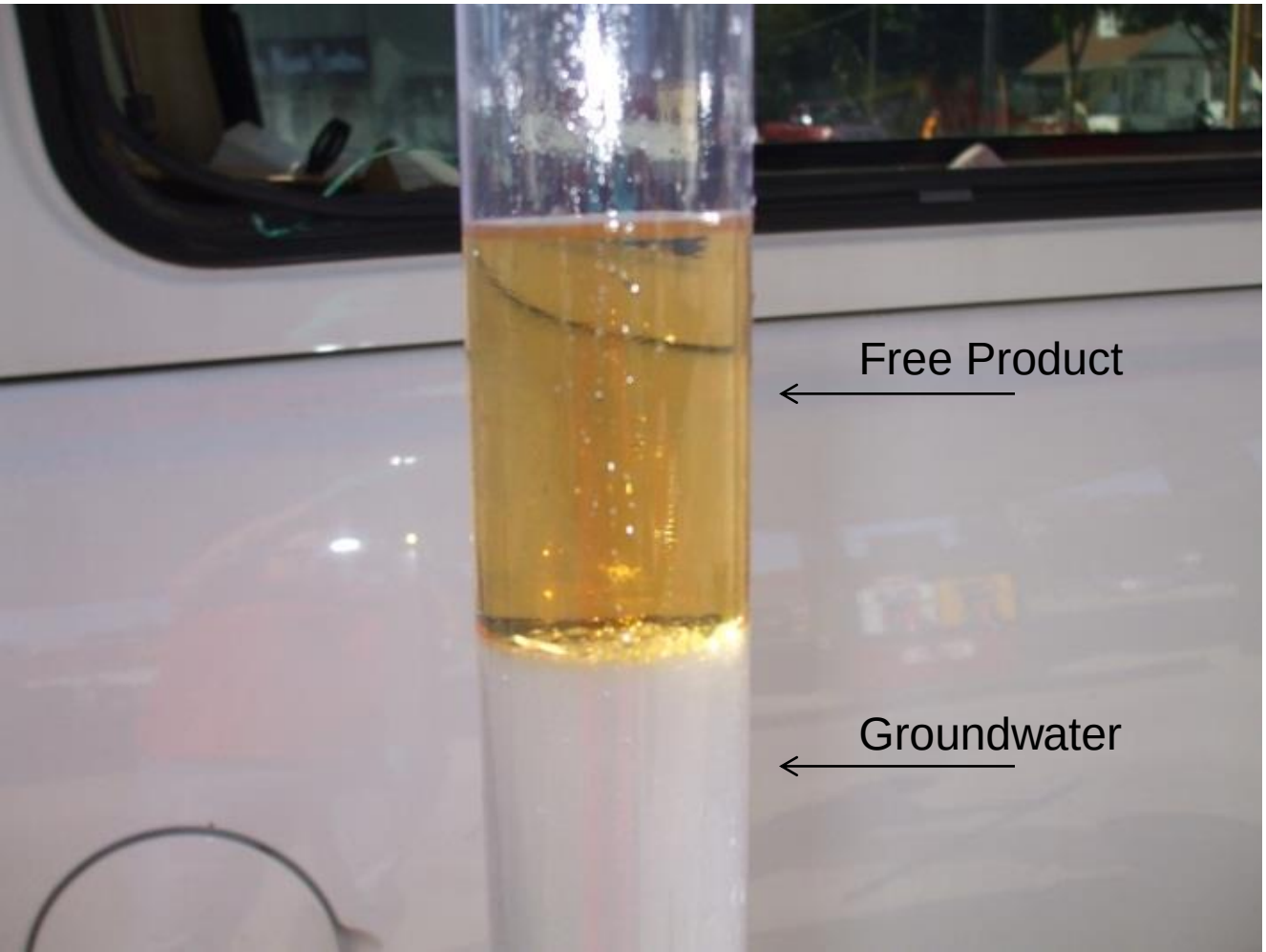
Extreme High Level Water Contamination- Free Product (Fuel) Floating on Water Table Surface



This depicts a 1-inch diameter clear bailer that was used to sample groundwater from a monitoring well at a active fuel station. Free Product (fuel) is seen floating on the groundwater surface.

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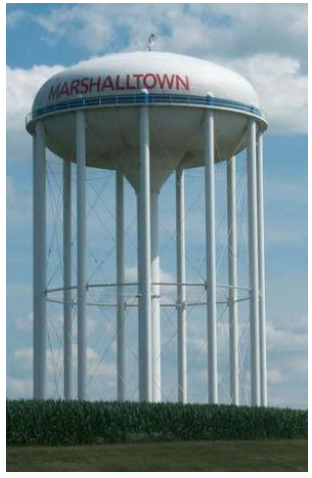
Low Water Contamination

- Very small amounts of fuel or solvent can contaminate large amounts of water
- 5 drops of fuel mixed with 55 gallons of water will contaminate water above drinking water limits
- 5 ounces of fuel mixed with 1.5 million gallons of water will contaminate water above drinking water limits



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Contamination Detection

- Federal/State/Cities typically require all water discharges to be below drinking water standards
- Drinking water standards are so low that you can not smell, taste, or visually detect contaminated water
- Must use certified laboratories to test water

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Groundwater at UST sites

- Consider groundwater at a UST site contaminated unless proven otherwise by laboratory results

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Contaminated Water

- Consequences of releasing contaminated water are VERY SERIOUS
- Must consider risks
  - Even if laboratory results indicate no contamination, pockets of contamination may still exist and may be drawn in during pumping

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Seneca Environmental – Permitted Discharges

- Lengthy process
- Sampling, Equipment, Operation, Monitoring,
- Ballast Water

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Permitting Process

- Storm sewer- NPDES, must permit through State (6mo)
- Sanitary sewer- City, Mayor, POTW, City Council, Zn, flow, time of day
- May not be able to get a permit

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Seneca's Groundwater Discharge Policy

- Signed by each Seneca employee
- Discharge Policy Summary
  - Groundwater at AST or UST sites is often contaminated
  - All precautions MUST be taken to protect human health and the environment as well as complying with federal, state, and local regulations
  - Involve a CGP in the permitting/review process
  - NEVER pump groundwater or petroleum contact water to a storm sewer, sanitary sewer, or release to the surface without completing the proper due diligence with regulatory party or parties
  - MUST document discharge approval process and submit to GM or Branch Manager of Seneca Environmental Services or Branch Manager of Seneca Remediation for review and approval prior to discharging water

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