R0311

Wickham, Jerry, Env. Health

To: Katie Welbourn; Peter Littman

Subject: Stockpile soil sampling

Katie,

If Peter is in the field, would you please see that Peter receives the following message?

Peter,

Below are my comments on the two issues discussed be telephone earlier today.

1) Collection of Soil Samples for Stockpile Soil Characterization. Soils are not be be composited for VOC analysis. We request that you collect four soil samples per 100 cubic yards (one soil sample per 25 cubic yards) and the use field screening to select one of the four discrete soil samples for laboratory analysis. The four soil samples are to screened in the field for VOCs using headspace measurements as described in item 2. The soil sample with the highest PID reading is to be submitted for VOC analysis using EPA Method 8260. If none of the samples exhibit PID readings or the PID readings are similar, one of the four soil samples is to be selected randomly for laboratory analysis. Please collect soil samples for laboratory analysis more than six inches below the stockpile surface.

2) Headspace Screening. Headspace screening of soil samples is to be conducted using either glass jars or plastic bags. The glass jars are to be half filled and covered with aluminum foil that is secured by the screw cap. Plastic bags are to be half filled and sealed with zip locks. The samples are to be shaken for at least 30 seconds during a 15-minute period to allow for headspace development. The samples are to heated to at least 50 degrees Fahrenheit either in the sun or inside a vehicle or building. After an approximately 15-minute period, the PID probe is to be inserted into the jar or bag. The maximum response of the PID meter is to be recorded.

3) Screening Levels for Soil Reuse. During excavation, any soils with visible staining, odor, or elevated PID readings are to be segregated from soils not exhibiting any of these indications of contamination. Soils with visible staining, odor, or elevated PID readings are to be disposed off-site. Unsaturated soils that do not exhibit staining, odor, or elevated PID readings may be reused as backfill provided that the stockpile characterization soil samples discussed in item #1 contain less than 0.087 mg/kg of tetrachloroethene, 0.26 mg/kg of trichloroethene, 0.18 mg/kg of cis-1,2-dichloroethene, or 0.18 mg/kg of benzene. ACEH is to be consulted if other VOCs are detected in the stockpiled soils.

Regards,
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