



ECO-h Diagnostic Tool

Ground Spill Cleanup:

1. Source of contamination:
2. How deep is the contamination? Ft/meters
3. Estimate the size of the zone of contamination: cubic meters or acre-ft.
4. Type of soil:
5. pH of Soil:
6. Alkalinity of soil, in mg/L:
7. Temperature: Air deg. F deg. C
8. Temperature: Ground deg. F deg. C
9. Natural moisture content of soil, as %:
10. Current range of TPH in ppm
11. Current range of PAH in ppm
12. Current range of asphaltenes in ppm
13. What is the current level of heavy metals in ppm?
14. Measure of the following in ppm or mg/L: Carbon: Nitrogen: Phosphorus:
15. Is a tractor and offset disc harrow available to till the soil? ...Yes No
16. If yes above, how deep can the blades till, in feet?
17. How often is it practical for you to till the soil?
18. Do you have a portable irrigation system? Yes No
19. Are you willing to set up such a system? Yes No

Used Drilling Mud

1. Source of drilling mud
2. Volume per month
3. Volume per year
4. Type of soil: Sand, Clay Loam Other
5. pH of Soil:
6. Alkalinity of soil, in mg/L:
7. Temperature: Air deg. F deg. C
8. Temperature: Ground deg. F deg. C
9. Natural moisture content of soil, as %:
10. Current range of TPH in ppm
11. Current range of PAH in ppm
12. Current range of asphaltenes in ppm
13. What is the current level of heavy metals in ppm?
14. Measure of the following in ppm or mg/L: Carbon: Nitrogen: Phosphorus:
15. Is mechanical separation used as a first step to decrease the concentration of TPH? Yes No
16. If the answer to the preceding question is "yes", what volume of drilling mud will remain for biological treatment?
17. What will be the mg/L of TPH of the remaining waste, after mechanical separation?
18. List ingredients, and percentage of each, in fresh, **uncontaminated mud** (not the same as question about mud containing drill cuttings above):
19. Is land farming considered an option? Yes No
20. Which of the following alternates to land farming would you consider (check all that apply): Static pile composting Slurry phase treatment Activated sludge treatment Fluidized bed
21. If any of the above alternate treatment systems are selected, please draw a diagram of the system and its flow and provide to your ECO contact.
22. Is a tractor and offset disc harrow available to till the soil? ...Yes No
23. If yes above, how deep can the blades till, in feet?
24. How often is it practical for you to till the soil?
25. Do you have a portable irrigation system? Yes No
26. Are you willing to set up such a system? Yes No

Current Chemical/Biological Treatment Program

Please list the product names and dosages of your current treatment program.

Current Mechanical or Thermal Treatment Program

Please list the current methods and describe the processes used for mechanical or thermal treatment:

Miscellaneous Comments

Please use this space to say anything else you wish to tell us about your project. The blank is not limited in size, so you can fill in any information you feel is useful: