Subsurface Investigations for Waste Storage Facilities
Roles and Responsibilities

Landowner/Operator

1. Provides District Conservationist (DC) with accurate and complete information and management decisions for determining waste volume(s) and type(s), waste system component type(s), locations and dimensions.
2. Informs DC of location of buried features within and adjacent to the investigation area - utilities, animal carcasses, rock piles, construction or demolition debris, etc.
3. Addresses site safety concerns, including location of buried utilities (Miss Dig), prior to beginning of the investigation.
4. Provides appropriate power equipment and operator.
5. If monitoring wells are needed, provides monitoring well materials and contractor to install monitoring wells (monitoring wells includes piezometers and observation wells).
6. Is on site or available nearby during the subsurface investigation in order to make decisions when needed.
7. Where soil pits are left open, pits are covered and/or barricaded until they are backfilled.

District Conservationist or Representative Assigned by DC

1. Has needed planning training and experience, program knowledge, developed relations with customer, responsibility for agency work in the county.
2. Performs a soils and surface features inventory and preliminary soils investigation to "weed out" the more obvious unsuitable sites (shallow bedrock, karst bedrock, high water table, buried waste, inundation prone, too steep, etc.) prior to scheduling technical assistance from the Area staff:
    a. Consults soil survey, topographic maps, aerial photos, etc.
    b. Consults Cooperator folder(s) for availability of soils data from previous investigations.
    c. Manually augers several shallow holes in key locations to confirm soil survey data.
    d. Consults with Area Resource Soil Scientist (ARSS) for assistance with identification, understanding and interpretation of soils and soil survey data.
3. Provides Engineer with site soil map, topographic map, aerial photo, water well logs, soil boring logs from past investigations, etc.
4. Consults with the Engineer to determine initial proposed extent of subsurface investigation needed – location, quantity and depth of investigation holes.
5. Coordinates completion of the initial cultural resources review required for the subsurface investigation. Coordinates completion of an additional cultural resources review, where required, if there is a changed site location. Ensures that the Area of Potential Effect (APE) is large enough so that if the location of the waste storage facility must be changed, the new location is still within the APE.
6. Provides Subsurface Investigation for Waste Storage Facilities Frequently Asked Questions document and this Roles and Responsibilities document to Landowner/Operator. Reviews these documents with Landowner/Operator.

7. Where power equipment is needed, provides landowner with maximum anticipated excavation depth and other information pertinent to the excavation contractor.
8. Coordinates and schedules with Landowner/Operator, Soil Scientist and Engineer for date and time to perform the investigation.
9. Provides answers to program questions that may arise during subsurface investigation.
10. Leads discussions to re-evaluate component alternatives, locations, re-direction of subsurface investigation to a new location.
11. To the extent practicable, ensures that adequate time is available for the Engineer to collect and interpret Inventory & Evaluation data prior to program signup deadlines.

Area Engineer (AE) or Engineering Staff Assigned by AE

1. Has needed engineering training and experience.
2. Makes decisions and determinations within scope of individual's engineering approval authority.
3. Assists DC with initial proposed determination of location, number and depth of investigation holes.
4. Collaborates and consults with ARSS for the following tasks:
    a. Performs field soil classification by Unified Soil Classification System.
    b. Collects, packages and labels soil samples for laboratory testing.
    c. Documents the investigation:
        i. Completes NRCS-ENG-533 Log of Test Holes
        ii. Photographs soil pits and spoil piles
        iii. Surveys and records test pit locations and elevations
        iv. Prepares soil sample list
    d. Evaluates findings as investigation progresses, determines need for and location of additional soil pits.
5. Requests NRCS Soil Mechanics Laboratory services. Analyzes laboratory test results and requests State Office assistance when appropriate.
6. Evaluates how findings of subsurface investigation impact the proposed component(s) and alternative(s).
7. Assists in discussions to re-evaluate component alternatives, locations, re-direction of soil investigation to a new location.
8. The individual who approves the design is responsible and accountable for the technical soundness of an engineering design (I&E or preliminary, and final). The individual who approves the design is also responsible and accountable for the conclusions drawn from interpretations of subsurface investigation data, and the design decisions made based on that data. Therefore, the design approver is responsible for:
    a. Determining if the subsurface investigation is sufficient for completing the engineering design.
    b. Determining water table location and type.
    c. Determining overall suitability of site for the planned practice.

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Roles and Responsibilities (cont.)

d. Determining need for, quantity, locations, and screen point elevations of monitoring wells (piezometers and observation wells), as necessary.
e. Consulting with the ARSS for observations, interpretations and documentation that may assist with making engineering decisions.

Area Resource Soil Scientist (ARSS)

1. Has needed soils/geology training and experience.
2. Identifies, interprets and documents soil classification, soil and water features.
3. Provides engineer with interpretation of observed soil and water features. Includes assisting AE with completion of NRCS-ENG-533 Log of Test Hole.
4. Provides input, suggestions and recommendations where engineering decisions need to be made.
5. Assists in discussions to re-evaluate component location, re-direction of subsurface investigation to a new location.