

What if a Site Does Not Meet the Post-construction Soil Standard Requirements?

If inspection indicates that an installation does not fulfill the approved SMP, the permit holder or their agent should be notified of what steps are needed to comply. When results are unclear or disputed, an independent consultant should conduct sampling for analytical testing of organic matter as described in the project specifications. Qualified consultants include certified soil scientists; crop advisors or agronomists; or licensed landscape architects, civil engineers or geologists.

Compost Facilities permitted by Washington State (King, Snohomish and Pierce Counties)

- Bailand Farms YW Composting
- Cedar Grove Composting, Inc.
- Miller Creek Compost Facility
- Northwest Organics - Wilcox Farms Compost Site
- Pacific Topsoils
- Pierce County Recycling, Composting & Disposal, dba LRI - Purdy Facility

If compost is from another facility, call the Washington State Department of Ecology at 425-649-7000 to verify that it is a permitted facility.

Site Inspection Supplies

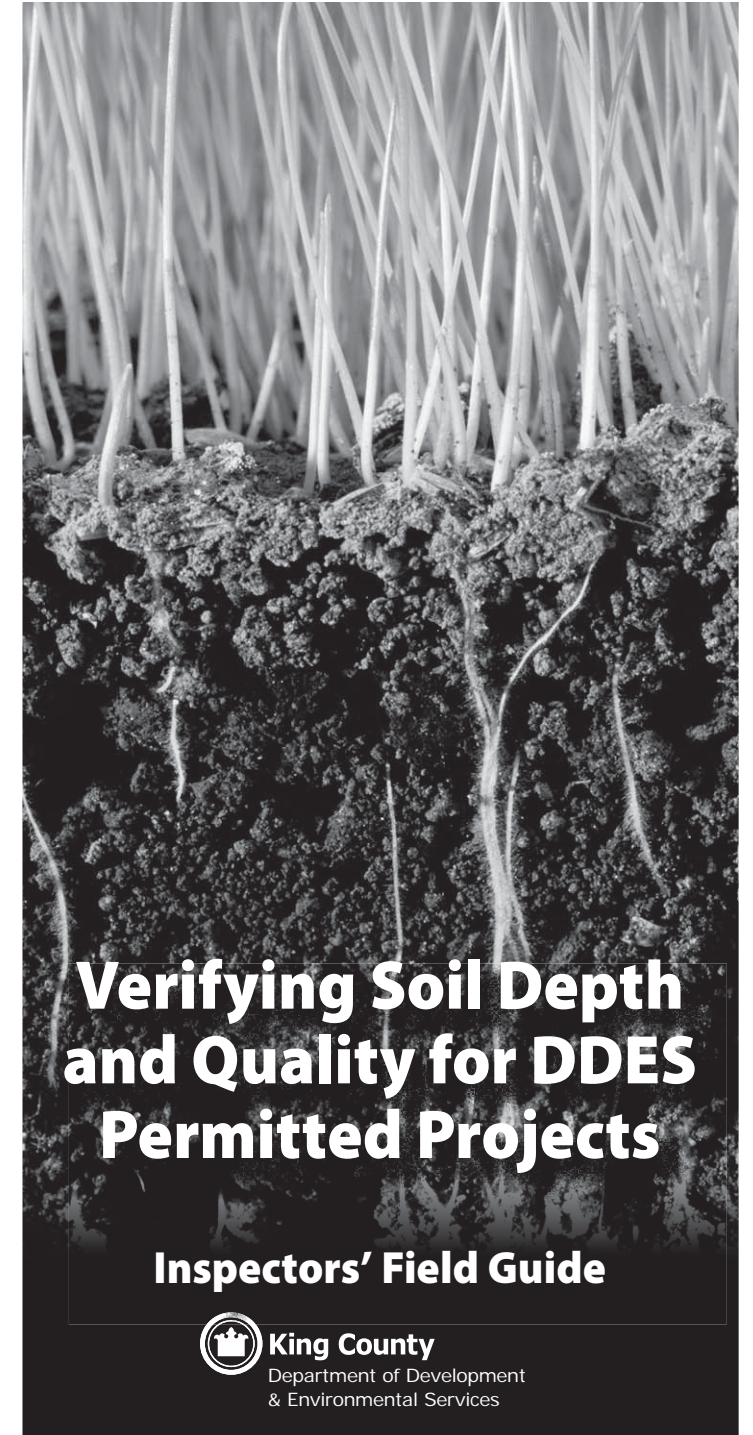
- Approved Soil Management Plan (SMP) for the site with the following attachments:
 - Scale site drawings that include areas to be treated with soil treatment options 1 – 4b
 - Completed *Compost and Topsoil Calculation Worksheet* or *Calculating a Custom Compost Amendment Rate Worksheet*
- Sturdy shovel
- Tape measure or 12" ruler
- Field Verification Forms to record results

Verifying Soil Depth and Quality for DDES Permitted Projects

Inspectors' Field Guide



May 1, 2006



This guide is for King County inspectors to use in verifying topsoil depth and quality in compliance with the Post-construction Soil Standard (KCC 16.82)

The following steps should be completed during the initial and final site inspections for projects subject to this requirement.

STEP #1

Compare site conditions with approved Soil Management Plan (SMP).

The SMP describes the soil treatment for each specific area. Make sure site conditions match these details in the SMP:

- Site location and permit holder
- Areas for soil treatments match plan drawings
- Areas to remain as undisturbed native soil and vegetation have been fenced off during construction to prevent soil compaction or damage to plants

STEP #2

Inspect delivery tickets and test results for compost and/or topsoil.

For soil treatment options 2, 3 and 4b, permittee must present original delivery tickets and test results for the compost and/or topsoil products for the project, as well as provide copies of them for the permit file.

Compare delivery tickets with the SMP to match the following information:

- Delivery location
- Total quantities for each soil and/or amendment product
- Product descriptions and sources

Check that the compost and/or topsoil products used meet the following requirements:

- Compost is from a facility permitted by the Washington State Department of Ecology (see back of this guide for list of facilities).
- Compost should contain 40 – 60% organic matter
- Topsoil should contain 8-13% soil organic matter, which is typically 30-40% compost by volume

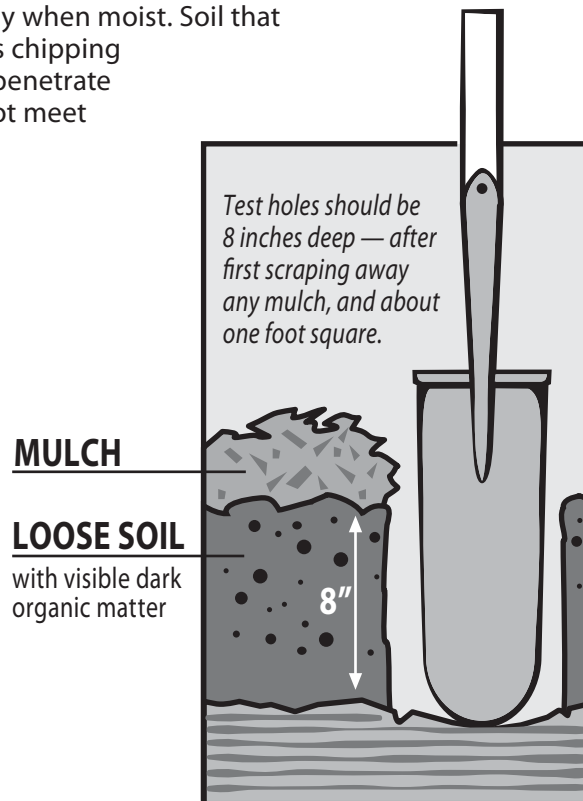
If materials other than those listed in the SMP were delivered, laboratory test results must be provided to confirm that they are equivalent to approved products.

STEP #3

Verify depth of soil and, if applicable, soil amendment by digging test holes.

Use a shovel to dig at least one test hole per acre to verify 8 inches topsoil depth (below any mulch layer), and incorporation of amendments.

The hole should be at least 8 inches deep and 1 foot wide. The top 8 inches of soil should be easy to dig using a garden spade driven solely by your weight. The soil should be darker than unamended soil below and particles of added organic matter are likely to be visible. Clay soil that has been saturated and then dried may require jumping on the shovel step to penetrate, but the soil should yield easily when moist. Soil that requires vigorous chipping with a shovel to penetrate probably does not meet the specification.



STEP #4

Check soil depth in multiple areas by using shovel tests.

Use a shovel to confirm that the soil is uncompacted eight inches deep at 10 locations per acre – with a minimum of 10 on smaller sites, unless otherwise specified on the approved SMP. To locate test spots, imagine a line dividing the site (or each acre) in half lengthwise, and then divide each half into 5 nearly equal sections. Conduct tests near the middle of each section.

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The shovel should enter the soil 8 inches deep, driven solely by the inspector's weight.

