

## Collection of Soils and Other Geological Evidence for Criminal Forensic Applications



### WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

### WHAT IS THE PURPOSE OF THIS STANDARD?

This standard provides guidance to forensic science practitioners who are responsible for performing or providing instruction on the documentation, collection, and preservation of soil and other geological evidence. This guide can be used by forensic science service providers (FSSPs) to develop procedures for collecting soils for forensic applications.

Sampling of soils for environmental contaminants is outside of its scope.

### WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Geological trace evidence can be used to demonstrate how and where a crime happened. Soil may be inadvertently transferred at a crime scene to an item and can be examined and compared to soil samples intentionally collected at a crime scene.

Soil evidence is common in crimes committed outdoors and can augment other forensic disciplines including impression evidence, wildlife crimes, or search for burials. This document provides a centralized guide for use by a broad community of crime scene investigators and forensic scientists.



### HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

This guide is to be used by forensic science practitioners and crime scene investigators to improve the collection, packaging, and preservation of soil evidentiary material. The quality of soil collection may be affected by tool materials used (collection and cleaning) and soil removal techniques.

This guide includes information, recommendations, and requirements for collecting, documenting, preserving, and packaging questioned and known (reference) soil samples.

- Questioned soil is that adhering to non-porous objects (e.g., vehicles) or porous objects (e.g., upholstery), on or within bodies, and on the surface or sub-surface.
- Reference soil is collected from locations of interest. Strategies are provided for the collection of known surface and subsurface soils.

A companion video has also been developed that covers some of the information in this guide. Access here: <https://youtu.be/o9dWZOj1U5A> or by using the QR code.

Collection of  
Forensic Soil Evidence  
Explanatory Video

