



ENVIRONMENTAL TREATMENT: Excavation

Shaw Air Force Base, S.C.

Excavation is a remedial action involving the removal of contaminated soil and moving it to a location where it can be stored or treated safely (such as a hazardous waste landfill.)

HOW DOES IT WORK?

The contaminated area is studied to determine the best way to clean up the contaminated soil. If excavation is the best method, the contaminated soil is dug up by machine and hauled away on a truck for treatment or disposal in a landfill. Soil removal and disposal is conducted under permit and with oversight from environmental regulatory agencies, such as the South Carolina Department of Health and Environmental Control.

WHAT HAPPENS TO THE SOIL?

The contaminated soil is hauled to an appropriate landfill equipped to ensure the contaminated soil does not come in contact with the environment. The landfill must follow certain rules when handling contaminated soils and other waste material.

WHAT ARE THE BENEFITS?

Excavation is a fast way to clean up a contaminated area, but it can cost a lot of money and disturb the area around the contamination. Sometimes, however, it is the only way to make sure all the contamination has been removed and is no longer a risk to the community.

WHERE IS EXCAVATION USED AT SHAW?

Of the 21 open sites undergoing current investigation and cleanup at Shaw, the Air Force has excavated contaminated soil as part of remediation at sites OT-16A, the motor pool area, SD-29 and ST-30. The Air Force removed 161 tons of dieldrin-contaminated soil from the first site (in 2002) and replaced it with 390 tons of clean soil. Eighty tons of soil were removed from each of two sites: SD-29 (in 1992) and ST-30 (in 1991).

WHAT HAPPENS WHEN SOIL IS EXCAVATED?



First, environmental scientists evaluate the area of concern to determine the most efficient way to clean up the site. They can take many soil and water samples to be analyzed in laboratories to determine the kinds of pollutants in the soil.

If scientists decide it is the best way, soil is removed from the ground using shovels and other industrial equipment. Workers take appropriate precautions to ensure they are safe from contamination.



The contaminated soil is loaded onto trucks and hauled away to an appropriate landfill where it will pose no threat to human health. Clean soil is often used to replace the soil removed from the contaminated area.

POINTS OF CONTACT

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FOR MORE INFORMATION

U.S. Environmental Protection Agency: www.epa.gov
South Carolina Department of Health & Environmental Control: www.scdhec.gov

