Division of Environmental Response and Revitalization
March 2024

Frequently Asked Questions about the Management of Soils

Introduction

Ohio EPA receives many questions about soil management. The purpose of this fact sheet is to summarize the issues faced by the decision maker (developer, property owner, contractor, etc.), when moving soils involved in remediation or construction. The information provided is not meant to address such activities as farming, mining, or treatment. Nor is it meant to be applied to other materials such as foundry sand, ash, sludge, or sediments from dredging.

Why is soil movement regulated?

Ohio has laws that protect our water and air resources (ORC 6111 and ORC 3704). If the movement of soil results in water pollution (e.g. silting up a stream) or air pollution (dust), then there would be an obligation to comply with Ohio EPA regulations intended to minimize such environmental impacts. If the soil is contaminated, there is an increased potential of adverse impact to human health or the environment. If the soil is contaminated and is located or relocated near surface waters (streams, lakes, wetlands), near an aquifer, or near a drinking water supply well, then there may be obligations to comply with additional Ohio EPA regulations. If the soil is a waste, then the movement of the soil is strictly regulated.

When should a soil be managed as a waste?

A soil should be managed as a waste if it meets one of the following two criteria (see also the attached flow chart):

1. The soil is being moved and it is a waste by regulatory definition (it meets the criteria for being a hazardous waste as evaluated in accordance with OAC 3745-52-11, or it is commingled with radioactive materials, or it is regulated under the Toxic Substance Control Act (TSCA) for PCBs). This determination can be made by testing the soil.
2. Any regulatory authority (federal, states or local) requires that the soil be removed or specially managed because the contaminants pose a risk or potential risk to human health or the environmental. Such requirements can be imposed through hazardous waste closure plans, implementation of contingency plans, issuance of remediation orders, permits, soil management plans, and other administrative actions. This criterion does not include soil managed or moved as part of a voluntary action, or an independently conducted (non-regulatory mandated) clean-up.

When do I need to test the soil?

Soil is often contaminated to some degree. However, not all contaminated soil is a waste. It is the responsibility of the decision maker to determine whether the soil should be managed as a waste. The first step is to determine if it is reasonably likely that a release occurred.

If there might have been a release, then the soil should be tested for the suspect contaminant (hazardous substance, radioactive material, PCBs). Contact the following divisions and agencies to determine if the soil is regulated as a waste and what management options are available.

If contaminated soil is a hazardous waste, it must be managed in accordance with state and federal hazardous waste requirements. Contact Ohio EPA's Division of Environmental Response and Revitalization.

If the soil is commingled with radioactive materials, it must be managed in accordance with state and Nuclear Regulatory Commission requirements. Contact the Ohio Department of Health.

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If the soil is contaminated with PCBs, contact the U.S. EPA Region 5 PCB coordinator. Region 5 implements the regulations or the processing, distribution, use, cleanup, storage, and disposal of PCBs under TSCA in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin, and also provides support for TSCA compliance. Ohio EPA's Division of Environmental Response and Revitalization can also provide support in some instances.

If the soil is contaminated but is not being moved or it is not a waste by definition, review the information in the section titled "Why is soil movement regulated?" for other considerations.

What happens when a state or federal agency requires that the soil be removed or specially managed?

The closure plan, contingency plan, remediation order, soil management plan, permit, or other administrative action should already provide instruction on how to manage any contaminated soil. If the plan or order does not provide such instruction, then the soil should be tested to determine if it is a waste by definition. Review the information in the section titled "When do I need to test the soil?".

If the soil required to be removed does not need to be specially managed (i.e., as hazardous, PCB, or radioactive waste), then it is a solid waste. Contact Ohio EPA's Division of Materials and Waste Management for disposal options.

Note that petroleum contaminated soil from underground storage tanks is regulated by the Bureau of Underground Storage Tank Removal. However, Ohio EPA's ***Guidance for Assessing Petroleum Hydrocarbons in Soil*** may be useful for regulators and responsible parties in assessing risk from soil impacted by petroleum hydrocarbons.

What if a Voluntary Action is being performed on the property?

Voluntary actions are another mechanism which can be used to protect the environment. The certified professional needs to show that all applicable regulations were followed, that the remedy is permanent, and that the property meets the Voluntary Action Program standards. If these requirements are met, then the certified professional issues a "no further action" letter.

To issue a "no further action" letter, the certified professional will need to be aware if the contaminated soil is a waste or not, if the soil is to remain on site, if other soils are to be brought onto the site and their level of contamination and whether that soil is a waste or not, and if the soil is to be removed from the site.

Who do I contact if I have questions?

The management of soil and how it may be regulated may involve multiple agencies and divisions of Ohio EPA.

Agency/Divisions	Phone Number
Bureau of Underground Storage Tank Removal (petroleum contaminated soil from underground storage tanks)	614.752.7938
Ohio Department of Health (radioactive materials)	614.644.2727
Local Health Department (private wells)	various
Ohio EPA/Division of Environmental Response and Revitalization	614.644.2924
Ohio EPA/Division of Surface Water (stormwater run-off, protection of surface water)	614.644.2001
Ohio EPA/Division of Air Pollution Control (dust)	614.644.2270
Ohio EPA/Division of Drinking and Ground Waters (public wells, aquifer protection)	614.644.2752
Ohio EPA/Division of Materials and Waste Management	614.644.2621

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Most Ohio EPA programs are represented locally at the ***district office***. You may also contact each of the Ohio EPA programs at the following district office phone numbers:

District Office	Phone Number
Northwest	419.352.8461
Northeast	330.963.1200
Southwest	937.285.6357
Southeast	740.385.8501
Central Office	614.644.3020

Soil Management Examples

Example: Management of soil at a remediation site.

If the regulatory authority (federal, state, or local) requires that the soil be removed or specially managed through hazardous waste closure plans, implementation of contingency plans, remediation orders, permits or other administrative actions, then the decision maker needs to comply with the instructions in those plans, orders, permits or actions.

If those plans or orders result in the soil having to be removed from the site, then that soil is a waste. If the plan or order does not include instructions on how to manage those wastes, then contact the appropriate agency.

If those plans or orders do not provided instructions on how to manage contaminated soil, then the soil should be tested to determine if the concentration of the contaminants in the soil meets the definition of being a waste. If the soil is a waste, then contact the appropriate agency for available management options.

Example: Management of soil at a construction site.

It is the responsibility of the decision maker to determine if any contaminated soil at the site is a waste by definition.

The first step is to determine if it is reasonably likely that a release occurred.

If there might have been a release, then the soil should be tested for the suspect contaminant (hazardous substance, radioactive material, PCBs). If the concentration of the contaminant in the soil meets the definition of being a waste, then contact the appropriate agency or division for management options.

If a release did not occur, be aware that Ohio has laws that protect our water and air resources (ORC 6111 and ORC 3704). The Ohio EPA may take enforcement action if the movement of the soil results in water pollution (e.g., silting up a stream) or air pollution (e.g., dust)).

If the soil is contaminated, whether the soil is moved or not, there is an increased potential of adverse impact to human health or the environment. If the contaminated soil is near surface waters (streams, lakes, wetlands), near an aquifer, or near a drinking water supply well, then there may be obligations to comply with additional Ohio EPA regulations.

If the soil is taken to another site, or if soil is brought onto the site from another site, it is likely that the user of the soil will apply standards to the soil before accepting it. The user may reject the soil if the level of contamination is unacceptable or if it cannot meet engineering specifications. If this occurs, the soil does not become a waste, but another user or management option will need to be sought.

Example: Management of soil at a VAP site.

It is the responsibility of the certified professional to determine if any contaminated soil at the site is a waste by definition. Refer to “Example: Management of soil at a construction site” for the determination process.

To have a “no further action” letter issued, the certified professional needs to document that all applicable regulations were followed, that the remedy is permanent, and that the property meets the VAP standards.

If the soil is a hazardous waste, or commingled with radioactive materials, or is regulated under the Toxic Substance Control Act for PCBs, contact the appropriate agency for management options.

If contaminated soil that is not a waste by definition is to remain on the property, or to be brought onto the property from another site, the property much be shown to meet the VAP standards.

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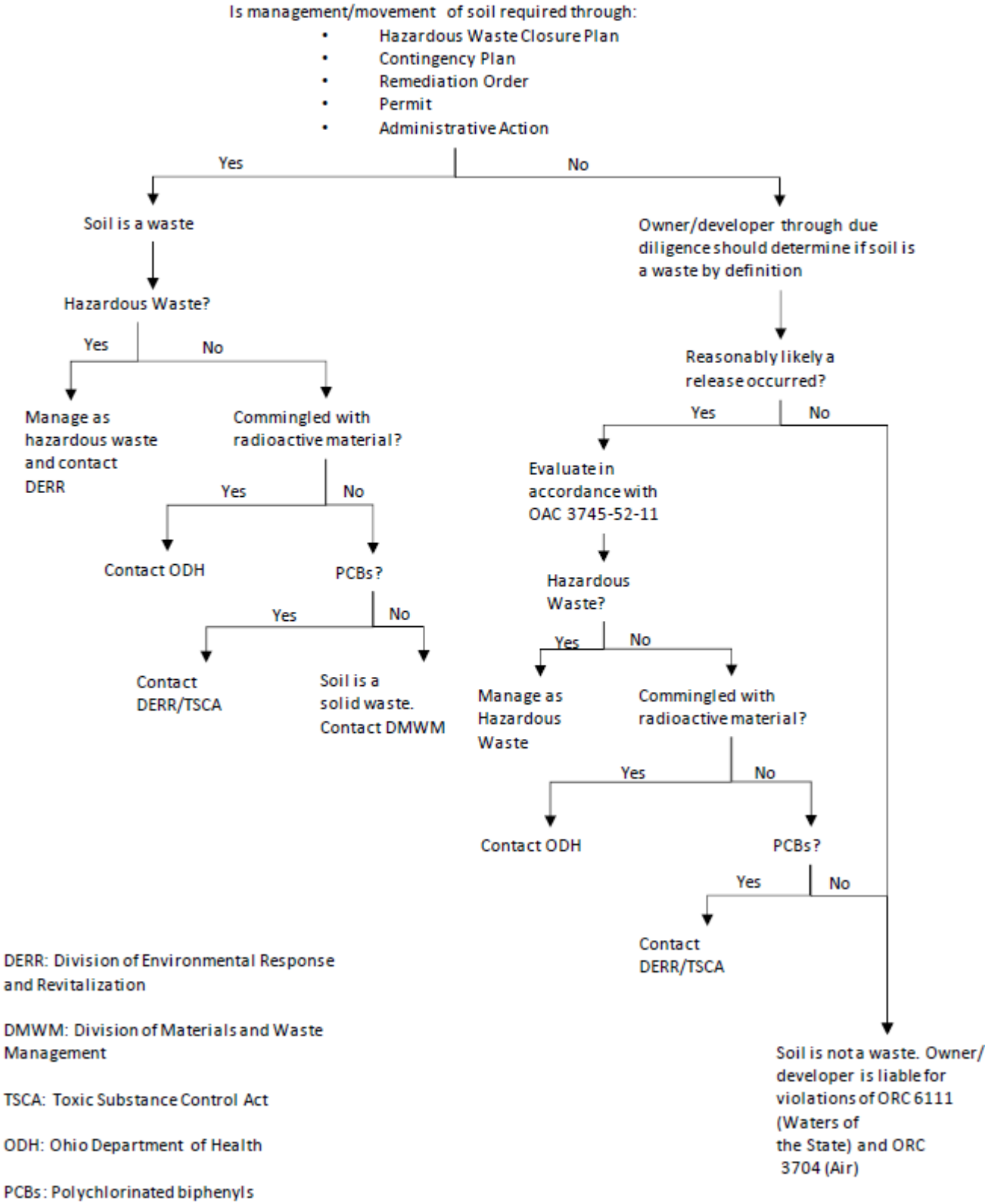
For contaminated soil to be taken off a VAP property, the certified professional must describe where the soils were taken and that the use or disposal of these soils is permanent and does not constitute a risk to human health or the environment, and if that soil is a waste that its management complies with applicable regulations.

Waste Classification Flowchart for Contaminated Soil



DERR: Division of Environmental Response and Revitalization

DMWM: Division of Materials and Waste Management

TSCA: Toxic Substance Control Act

ODH: Ohio Department of Health

PCBs: Polychlorinated biphenyls