

ADDRESSING PESTICIDE CONTAMINATION ON AGRICULTURAL LAND PROPOSED FOR DEVELOPMENT

The Land Recycling and Environmental Remediation Standards Act of 1995 (Act 2) was enacted principally to facilitate the cleanup of former industrial sites and return them to productive use. The Legislature envisioned this Act as an integral part of a sound land use policy that would help prevent the needless development of prime farmland, open space areas and natural areas. Consequently, the liability relief provided as a development incentive under Act 2 is not applicable to the development of lands that have been farmed in the normal course of farming practices.

Purpose

The purpose of this document is to clarify the protocol and standards that apply to farm land developments where substances such as arsenic and lead are present. Some former agricultural lands can pose concerns because of historical pesticide use. Of particular concern are arsenic and lead, which can remain in the soil for years at levels that can be a threat to human health. Since the liability relief afforded by Act 2 is not available, the Department has developed a procedure for addressing contamination on former agricultural lands to reduce risk to human health and the environment. This procedure applies to properties with pesticide contamination in excess of the residential or nonresidential Statewide health standard and is intended to be used by developers who propose to convert certain contaminated agricultural lands to other use.

Recommended Procedure

On orchard areas, after removal of the trees, scrape the first six inches of soil from the area within the drip lines of the former trees and other areas where contaminant concentrations are most likely to be greatest and stockpile this soil. Thoroughly till (with a deep disc) the soil between the rows of trees with the soil remaining within the drip lines.

For other former agricultural lands, scrape and stockpile the first six inches of soil from areas where contaminant concentrations are most likely to be greatest, such as at ends of rows or in areas where mixing of agricultural pesticides may have occurred prior to application.

Thoroughly till (with a deep disc) the remaining soil.

For residential developments on both types of agricultural land, after soil tilling and the residential lots have been laid out, collect two composite samples from each lot, one in the front yard and one in the rear yard. Each composite sample is to be blended from a minimum of 12 discrete samples.

For nonresidential developments, after soil tilling 12-part composite samples should be taken at the rate of two samples per lot for lots up to one acre in size, and at the rate of two samples per acre for larger properties.

At a minimum, the samples are to be analyzed for arsenic, lead, DDT, DDD, DDE, aldrin, and dieldrin. The developer is to use environmental due diligence to determine any additional agricultural chemicals for analysis.

If any one of the sample results exceeds the Act 2 Statewide health standard, the developer may either scrape an additional four inches of soil and add it to the stockpiled soil and retil, or thoroughly retil the entire lot. The lot is then to be resampled following the same protocol as the initial sampling.

The stockpiled soil may be used where exposure is controlled, such as under roads in the development or in other capped areas including basketball courts, tennis courts, or bike paths. Institutional controls are appropriate for all areas where the stockpiled soil is placed. The control is to include a health and safety plan for future disturbance of the area involved. If soil is placed under a large area such as a playground or park area, it is to be covered by a geomembrane material and at least two feet of clean soil.

The stockpiled soil may not be placed in drainage swales, stormwater management facilities, or within 100 feet of a surface water body including wetlands. If stockpiled soil is moved offsite, waste regulations or the Management of Fill policy apply.

Disclaimer

The Department recognizes that the soil blending described in this document represents a substantial departure from current Department policy, and therefore such blending may only be used on agricultural properties with historic pesticide contamination that are being converted to other use under the terms of this document. A developer must still comply with existing regulatory requirements, including the development of erosion and sedimentation control plans and permitting under the NPDES program. For example, sampling to determine the scope and extent of existing contamination may be necessary before the developer performs earth-moving activities.

Normal farming operations typically do not result in a release of a regulated substance as defined in Act 2, even though pesticides contain substances that are regulated by the Department. Therefore, this document is not suggesting that any additional regulatory requirements be placed on persons engaged in normal farming practices.

This procedure is not an adjudication or a regulation. There is no intent on the part of the Department to give this document that weight or deference. This document establishes the framework within which the Department will exercise its administrative discretion in the future.