



Use of Backfill

Introduction

The Indiana Brownfields Program (Program) has developed this fact sheet regarding backfill used on sites with Program oversight and/or involvement to help facilitate redevelopment of properties hindered by actual or potential environmental contamination. Sites with the added constraint of having to determine whether backfill material is appropriate to bring onto a site can rely on this guidance and/or contact the Program.

Appropriate Backfill

Backfill brought onto a brownfield site from an off-site source must be verified as clean. For granular materials (e.g., sand, pea gravel, stone) from a “clean” commercial source (e.g., quarry, gravel pit), typically no confirmatory sampling is required by the Program. If the proposed backfill material is cohesive in nature (e.g., clays, silty clays) and is from an off-site source, regardless of whether it originated from a commercial source or not, confirmation sampling is required. These requirements also apply to all sites receiving financial assistance from the Program.

Confirmation sampling can be accomplished by collecting three samples per source of “clean” fill and one additional sample for each subsequent 500 tons planned for use. The material should be sampled for source-specific potential constituents of concern and, at a minimum, sampled for VOCs, SVOCs (including polynuclear aromatic hydrocarbons (PAHs)), and metals. If a commercial backfill source has been previously tested for potential contaminants, such data may be submitted to the Program for evaluation. Soil sample analysis must be reported on a dry weight basis.

Program-Funded Sites

The Program is requiring sites at which it has awarded financial assistance that have excavated areas to be backfilled with granular fill material to grade with approximately four inches of crushed stone. Photographic documentation of the backfill being placed within the open excavation must be provided. Fill material must be consistent with that outlined, above, in *Appropriate Backfill*.

Program Recommendations

For any redevelopment project (residential, commercial, or industrial), the Program recommends contaminant concentrations in imported backfill meet R2 residential published levels regardless of site use so as not to trigger Solid Waste rules. The Program recommends documenting details of the material supplier’s imported backfill/soil source and quantity of material imported as part of redevelopment activities to avoid any future liabilities.

At a Glance:

What is a Brownfield?

A BROWNFIELD IS AN UNDERUTILIZED PROPERTY WHERE REDEVELOPMENT OR REUSE IS COMPLICATED DUE TO ACTUAL OR POTENTIAL ENVIRONMENTAL CONTAMINATION.

Program Decision-making related to appropriate backfill:

THE PROGRAM WILL CONSULT IDEM SOLID WASTE COMPLIANCE SECTION IN THE EVENT THAT IT NEEDS ASSISTANCE MAKING AN APPROPRIATE BACKFILL DETERMINATION .

For More Information about backfill:

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