



Contained-in Determination Criteria for Live Loading Soil

Office of Land Quality / Compliance Branch

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The purpose of this document is to provide guidance to hazardous waste generators pursuing the option of “live loading” contaminated media “soil” for disposal using the IDEM “Contained-in” Determination Policy.

Due to the nature of every soil removal that generates listed hazardous waste contaminated media being unique in operation and complexity, the type and scope of excavation and removal activities will vary. Therefore, careful review is important to ensure compliance with the regulations.

“Contained-in” Determination means a determination as to whether listed hazardous waste at concentrations below certain appropriate health-based levels is “contained in” the contaminated media. The “Contained-in” Determination Policy is documented in IDEM Nonrule Policy Document: Waste-0061-NPD.

Listed Hazardous Waste means a solid waste that is a hazardous waste because it is included in the 40 CFR 261 Subpart D and has not been excluded per 40 CFR 260.20 or 40 CFR 260.22.

Live Loading means to direct loading of excavated material (soil) into a vehicle for immediate transport from the site.

APPLICABILITY

When generating contaminated soil impacted with listed hazardous waste, compliance with the IDEM “Contained-in” Determination Policy and with the hazardous waste generator requirements in 329 IAC 3.1 can be achieved in part by excavating, sampling, and containerizing contaminated media. Containerized contaminated media is sampled at or near the point of generation (excavation), analyzed and the analyses are utilized to determine whether the contaminated media represented by that sample meets the contaminant concentration criteria in the policy and whether the contaminated media may be managed using the IDEM “Contained-in” Determination Policy. In certain limited circumstances, containerizing waste and staging multiple containers on-site may not be possible.

The ability to “live load” contaminated soil using the “Contained-in” Determination Policy is limited and is based upon the site conditions. The mere convenience of directly loading waste into trucks or the potential for cost savings are not factors in determining applicability. The applicability of “live loading” waste rather than containerizing the waste is based upon the available space either at the site or adjacent to the site and the ability to stage containers of contaminated soil pending sample analyses and characterization.

REQUIREMENTS

Site Limitations

The requestor shall provide documentation that space at the site or immediately adjacent to the site is not adequate to hold a working number of containers during an event generating contaminated soil. The argument that there is not enough space to stage 100 percent of the excavated soil on the site at one time is not considered to be a valid argument.

Sampling

Historic sample information, while useful in characterizing the site, is not applicable in characterizing the soil as generated.

If soil samples are to be collected prior to excavation for the purpose of characterizing the waste in situ, then there are certain requirements:

- The proposed area of excavation must be divided into a 10-foot x 10-foot grid. Samples must be collected from each 10-foot X 10-foot grid for the purpose of characterizing the soil within that grid segment.
- Samples must be collected at 2.5-foot intervals extending from the surface to the bottom of the proposed excavation
- Sample locations should be consistent within each grid (i.e., in the center of the grid).
- Sample locations should be recorded using a method that will allow the sample location to be located during later site activities. GPS locating sample locations is the preferred method.

In addition to pre-excavation samples collected and analyzed for the purpose of characterizing the contaminated soil in situ, ten percent (10%) of the volume of excavated soils must be sampled at the point of generation and analyzed to characterize the contaminated soil as generated to confirm that the contaminant concentrations within the contaminated soils do not exceed the levels in the “contained-in” determination policy. Confirmatory samples do not need to be submitted to the department but must be available for review.

Submittal

Analytical data for pre-excavation soil samples shall be submitted per the IDEM “Contained-in” Determination Policy. Given the potentially large number of samples and the associated analytical data, the sample information will be internally forwarded to the Office of Land Quality Chemistry Section for review and/or validation. The Chemistry Section review will generally be conducted on a 30-day turn-around basis but may take longer. This will increase the time to process the “contained-in” determination request.

Determination

Using the analytical data provided by the requestor, staff will determine whether the proposed excavation appears to meet the “contained-in” policy exit criteria. Contaminated soils represented by samples that contain concentrations of contaminants that either exceed the “contained-in” policy exit criteria and/or exhibit a hazardous waste characteristic will be required to be managed as hazardous waste.

The presence of a soil sample identified as a hazardous waste containing contaminant concentrations that negate the waste being managed using the “contained-in” policy, would mean that the entire volume of soil extending to the next sample that meets the “contained-in” exit criteria must be managed as hazardous waste. This extension to the next passing sample extends both laterally and vertically. The generator may:

- Live load the entire volume of the area extending to the next “passing” samples and dispose of it as hazardous, or
- Dispose of the impacted soil within the grid that has been identified as hazardous waste and excavate and containerize the soil outside of the impacted grid and extending to the next passing sample for further characterization and disposal. (This additional sampling of containerized soil does not count toward to requirement to containerize and characterize 10% of the total volume for confirmation that the contaminant concentrations are not exceeding “contained-in” criteria)

The requestor can further sample and delineate the area identified as hazardous waste if warranted. This may result in the submittal of additional analytical data and further review by the Office of Land Quality Chemistry Section.

The request to “live load” using the IDEM “Contained-in” Determination Policy may be granted in full, in part, or denied based upon the analytical results.

Approvals to excavate and live load contaminated soil for management using the IDEM “Contained-in” Determination Policy must be completed within 6 months of approval.

In the case of partial denial or full denial, “live loading” of contaminated soil as hazardous waste is allowable.

RESOURCES

40 CFR 262 Subpart D: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-261/subpart-D>

IDEM Contained-in Determination Policy: https://www.in.gov/idem/files/nrpd_waste-0061.zip

If you need additional information or have any questions or concerns, please contact staff of IDEM’s Compliance Branch, Office of Land Quality, at (317) 234-6923 or (800) 451-6027 press 6, or email hazwastereferrals@idem.IN.gov.