This guidance document supersedes DHWM’s 1984 policy titled, “Consolidation of Wastes as a Regulated Activity” and is intended to clarify when consolidation of hazardous waste meets the definition of treatment.

What is Consolidation?
Consolidation is the act of combining hazardous waste streams together. Hazardous wastes are often combined into a container to facilitate storage and transportation. Consolidation occurs when you remove hazardous waste from two or more containers and place them together into larger containers. It can also mean taking smaller loads of individual containers and placing them into a large transport vehicle. Consolidation can be performed by a transporter, generator or treatment, storage and disposal (TSD) facility. If, however, combining hazardous waste constitutes treatment, then hazardous waste regulations apply to the activity.

What is Treatment?
Treatment is any method, technique, or process designed to change the chemical or physical composition of any hazardous waste so as to:

- neutralize it
- recover energy or material resources from it
- make it non-hazardous
- make it less hazardous
- make it safer to transport, store, or dispose of
- make it amenable for recovery or storage
- or reduce it in volume

Treatment is specifically defined in Ohio Administrative Code (OAC) rule 3745-50-10(A). An example of treatment is when a generator, transporter, or TSD facility combines different hazardous wastes for the purpose of changing the chemical or physical characteristics of the waste so an incinerator or industrial furnace can burn the waste. This activity is often referred to as fuel blending.

What is Fuel Blending?
Although fuel blending is not specifically defined in the rules, it is discussed in U.S. EPA correspondence (see Fax-On-Demand 11881). Fuel blending is a process or method designed to mix various hazardous wastes or hazardous waste and commercial fuels to meet the specifications required by an incinerator, a cement kiln, or an industrial furnace. U.S. EPA and Ohio EPA consider fuel blending to be treatment. For facilities that receive hazardous waste from off-site, fuel blending requires a hazardous waste installation and operation permit for storage and treatment in order to conduct such activity. An example of fuel blending includes mixing a chlorinated solvent that has a lower British thermal unit (Btu) with a high-Btu material to make the chlorinated solvent with the lower-Btu value amenable for energy recovery.

What is Incidental Reduction?
Incidental reduction is not specifically defined in the rules, but it is described in U.S. EPA correspondence (see Fax-On-Demand 13764, 12458 and 11567). Incidental reduction occurs when two or more similar hazardous wastes are consolidated. The resulting mixture does not exhibit the same physical or chemical characteristics as the individual wastes did prior to the consolidation. An incidental reduction of hazards is not considered treatment. If you did not design or plan...
Hazardous Waste Consolidation

to neutralize; recover energy or resources from the waste; make the waste less hazardous, non-hazardous, safer to transport; store or dispose of; make it amenable for recovery, storage or reduction, the reduction could be considered to be incidental.

However, the resulting waste will still need to be treated for the individual wastes that were consolidated even if analysis demonstrates that one or more waste characteristics have been eliminated in the consolidation process. Although the consolidated waste will need to be treated for each of the hazardous wastes it contains, it will only need to be manifested if it is defined as a hazardous waste by either containing a listed hazardous waste or exhibiting a hazardous waste characteristic.

What Should I Do if an Incidental Reduction Occurs?

An incidental reduction of hazards is not considered treatment if the waste is appropriately treated as if the reduction had not occurred. One area of importance is the land disposal restrictions (LDR). At the point of generation, generators must determine whether the waste is a listed waste and/or a characteristic hazardous waste and determine what LDR requirements apply.

A listed hazardous waste remains a listed hazardous waste regardless of any subsequent consolidation and must be treated in accordance with the LDRs before disposal. However, the requirements are more extensive for generators of a characteristic hazardous waste because OAC rule 3745-270-09 requires that underlying hazardous constituents (UHC) be identified in characteristic hazardous wastes.

The generator who consolidates hazardous wastes, where an incidental reduction results in the loss of a characteristic or UHC, must carry over the waste codes and UHCs from the original waste onto the LDR notification form. If a transporter consolidates similar wastes and an incidental reduction occurs, the transporter is not required to change the LDR notification form. However, the transporter must comply with OAC Chapter 3745-52-20 to 27 by preparing a new manifest with the proper shipping description while attaching the original manifests to the new manifest [see OAC rule 3745-53-10(C)(2)]. Also, the transporter will need to ensure that the original manifests accompany the new manifest and are given to the owner/operator of the designated facility for signature and returned to the generator.

What Happens to me as the Generator if I do not Carry Over the Appropriate Waste Codes and UHCs onto the LDR Notification Form to Ensure that the Hazardous Wastes are Properly Treated for the Hazardous Constituents or Characteristics?

If you do not carry over the waste codes and UHCs, then you may be conducting dilution that is prohibited by OAC rule 3745-270-03. If, however, the consolidation activity actually treats (destroys or immobilizes) the constituent or characteristic, you have conducted generator treatment which is allowable during the appropriate 90 or 180-day accumulation period in proper management units. When treating to meet the LDR standards, you must have a waste analysis plan in accordance with OAC rule 3745-270-07(A)(5).

What is a Transfer Facility?

A transfer facility is a transportation-related facility that includes loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held in containers during the normal course of transportation.

As a Transporter, Can I Consolidate Manifested Shipments of Hazardous Waste at a Transfer Facility?

Transporters may only consolidate hazardous wastes in containers or tanker trucks at transfer facilities if the waste has been manifested to the same permitted TSD facility. Hazardous waste may be consolidated into other containers or tanker trucks as long as that consolidation does not meet the definition of treatment and all consolidated material goes to the designated TSD facility. All of the containers must meet the requirements of OAC rule 3745-52-30 for packaging wastes in accordance with U.S. DOT regulations 49 CFR Parts 172, 173, 178 and 179. Transfer facilities can store manifested waste shipments in U.S. DOT packages for up to 10 days without complying with the facility hazardous waste storage requirements and without needing a hazardous waste storage permit, as described in OAC rule 3745-53-12.
Hazardous Waste Consolidation

If such consolidation results in a change in the shipping description (including amounts and container type), then the transporter must comply with OAC Chapter 3745-52 by preparing a new manifest with the proper shipping description while attaching the original manifests to the new manifest [see OAC rule 3745-53-10(C)(2)]. The facility noted as the designated facility on the manifest cannot act as a transfer facility. Transportation ends when the hazardous waste arrives at the designated facility. Therefore, the exemption for transfer facilities does not apply to the designated facility.

As a Transporter, am I Required to Prepare an LDR Notification for Hazardous Waste Which Was Consolidated from Several Waste Streams?

A transporter who is only consolidating hazardous waste at a transfer facility, under the exemption in OAC rule 3745-53-12, is not required to comply with the LDRs in OAC Chapter 3745-270. A transporter who is consolidating hazardous wastes for the purpose of changing the constituent analysis for LDR purposes would be treating hazardous waste and would be required to obtain a hazardous waste facility installation and operation permit. Additionally, this transporter would be required to comply with the hazardous waste management standards applicable to owners and operators of treatment and storage facilities, including the land disposal restrictions.

As the Generator, Can I Treat my Waste On-site without a Permit?

Yes. As a generator, you are allowed to treat hazardous waste on-site without a permit if you comply with the requirements found in OAC rule 3745-52-34 (see Ohio EPA’s Generator Treatment guidance document). Large quantity generators (LQG) can treat waste for up to 90 days after generation, while small quantity generators (SQG) can treat waste for up to 180 days after generation. Conditionally exempt small quantity generators (CESQG) that treat their hazardous waste on-site must comply with the LQG requirements (see OAC rule 3745-52-34). If you treat to meet the LDR standards, you must have a waste analysis plan.

As a Treatment, Storage, and Disposal Facility, may I Consolidate Hazardous Wastes?

The owner/operator of a treatment, storage and disposal facility may consolidate hazardous wastes received from off-site in containers or tanks in accordance with the provisions described above for generators. The consolidation process itself would not be a permitted treatment activity.

As a Treatment, Storage and Disposal Facility, can I Act as a Transfer Facility for Wastes that aren’t Manifested to my Facility?

Yes. If your facility is not the designated facility on the manifest, then you may act as a transfer facility for that particular waste. The waste must end up at the facility originally designated by the generator on the manifest. Hazardous waste transportation ends when it arrives at the designated facility. Therefore, the exemption for transfer facilities does not apply to the designated facility.

Contact

For more information, contact the Hazardous Waste Compliance and Inspection Support Unit of the Division of Environmental Response and Revitalization at 614-644-2924.

References

1. Ohio Administrative Code Chapters 3745-50 through 3745-270
2. RCRA Online, October 1999, Fax-On-Demand: 14408
3. RCRA Online, October 1995, Fax-On-Demand: 13764
4. RCRA Online, October 1994, Fax-On-Demand: 11881
5. RCRA Online, January 1994, Fax-On-Demand: 13651
6. RCRA Online, August 1992, Fax-On-Demand: 13554
7. RCRA Online, November 1991, Fax-On-Demand: 13511
8. RCRA Online, October 1990, Fax-On-Demand: 11567
9. RCRA Online, April 1989, Fax-On-Demand: 13272
10. RCRA Online, September 1985, Fax-On-Demand: 12458
11. RCRA Online, January 1983, Fax-On-Demand: 12087