



Waste Determination and the Impact on Domestic Shipment and International Transboundary Movement

Waste Determination

Batteries when spent or used, and not intended to be reused, are a solid waste. Lithium batteries are one of many universal waste batteries, including nicad batteries and certain small lead-acid batteries. A lithium battery exhibits both the reactivity and ignitability characteristics, D001 and D003, respectively.

At the point of generation of the spent or used batteries the generator must make a determination whether the used batteries exhibit a hazardous waste characteristic. If so, the generator must manage the batteries pursuant to 40 CFR part 262, 40 CFR part 266 subpart G (lead-acid) batteries, or under the modified requirements applicable to universal waste under 40 CFR part 273.

A generator is not allowed to willingly forego the determination, and it is the generator that must make the waste determination based on either knowledge of the process that generated the waste or analysis before the battery is shipped to another location. In fact, 40 CFR 273.2(c) makes this clear for both used batteries and unused batteries:

A used battery becomes a waste on the date it is discarded (e.g. when sent for reclamation). (40 CFR 273.2(c)(1))

An unused battery becomes a waste on the date the handler decides to discard it.¹ (40 CFR 273.2(c)(2))

A generator that ships a waste battery to another location without first making a waste determination risks violating generator, transporter and even facility standards should that battery be determined to be spent at the destination location.

In any enforcement action, USEPA and state agencies typically look at several factors including the ultimate disposition of the battery when it reaches the handling facility. Probably the most important factor is whether upon receipt of the battery at the destination facility the battery is actually reused for its originally intended purpose. Other important factors include: (1) whether the destination facility is under the control of the generator; (2) whether the battery is being shipped to the facility for storage prior to recycling or disposal; and (3) nature of the facility, e.g. is the facility a RCRA TSD, destination facility or universal waste handler?

If the destination of a battery is a TSD or universal waste handler, it is relatively clear that the battery is being shipped there for disposal, recycling or being stored prior to disposal or recycling. If the waste determination for the battery is made at the destination facility (and the battery is deemed to be a hazardous waste at that facility) it becomes problematical:

1. The generator offered a shipment of waste without use of the manifest or modified paperwork for universal waste, and without labeling the batteries as "universal waste" or "waste batteries."
2. The transporter should have met the requirements of 40 CFR part 273 for transporting universal waste.

¹ "Handler" is defined as a generator or operator of facility that receives waste from handlers.





3. If the facility that accepted it is a RCRA TSD, it may have violated its permit. A universal waste handler could accept the waste batteries without violating its status or the regulations.

Primary lithium batteries are a unique type of hazardous waste, in that when used and not intended for reuse are, by definition, not able to be recharged. Certainly a generator can make the argument that a used primary lithium battery is not a solid waste (and thus not a hazardous waste) if after being removed from a tool they are reused in another tool or for another purpose for which they were originally created or intended to be used—for example, reused in another tool or for providing power for another purpose.

Domestic Generation and Challenges

This presents some practical challenges and questions, for example:

1. How batteries in tools are managed at a drill site.
2. How batteries in tools are transferred from a drill site to a central maintenance facility controlled by the generator.
3. How batteries are shipped amongst domestic facilities.

International Generation and Challenges

International shipments of waste are governed by bilateral agreements (e.g. US and Canada), regional agreements (e.g. some Latin America requirements), and multi-national or international agreements, e.g. Basel Convention, Basel Ban, and OECD transboundary agreements. The US, Canada, Japan, Korea, and western Europe are in the OECD and, with the exception of the US, are Basel Convention parties.

Importation of universal waste into the United States is also governed by the import controls under 40 CFR part 273. The same waste determination issue affects international shipments—one cannot wait to make the waste determination until the battery resides back on US soil. The determination must be made at the point of generation. Failure to make the determination at the point of generation (rather, in the country of generation) has potentially serious consequences both under US law and the law of the exporting country.

An example: The Company has a facility in Venezuela. The facility desires to ship waste batteries to the United States for storage and ultimately for disposal. Venezuela is a party to the Basel Convention, and as such may not ship waste to or accept waste from a country that is not a party. The United States is not a party to the Basel Convention, and there exists no bilateral agreement between the US and Venezuela or another multi-lateral agreement that allows shipments between the two countries. The shipment is not permitted because as proposed it is between a non-party and party to the Basel Convention (Article 4, paragraph 5).

In the foregoing example, if the batteries were shipped as “new” batteries and then were not actually intended for reuse (for their originally intended purpose...), the shipment will violate US and Venezuelan law. Instead, this example shipment should have been declared a hazardous waste in the country of export (Venezuela). Export permits should have been obtained from Venezuela, and import permits into a Basel party (e.g. Canada) should have been obtained. Obtaining the required permits certainly slows





down the first shipment of waste from a particular country, but once obtained Basel/OECD permits are valid for 1 year and for multiple shipments.²

The universal waste regulations are applicable immediately upon arrival in the United States (40 CFR 273.70), including transportation and universal waste handler regulations (60 FR 25534).

Relationship to USDOT Regulations

Whether a primary battery still possesses a particular voltage certainly makes a difference when it comes to determining the proper packaging under 49 CFR, but it makes absolutely no difference in the waste determination under RCRA (in this case 40 CFR part 273) unless such voltage indicates that the battery is still useful AND the battery actually ends up being reused (for its originally intended purpose, etc.).

An exception under 49 CFR has no bearing on the hazardous waste control laws, though the opposite is true, in that 40 CFR 273.52(a) makes it clear that universal waste is not subject to the USDOT regulations that apply to hazardous waste because the shipment of universal waste does not require a manifest.

Action Plan

1. Develop a clear and concise procedure for safely handling lithium and other universal waste batteries. The procedure should be general yet be specific where local, regional or country requirements dictate a different standard. It should include drill rigs, drill sites, warehouses, maintenance areas, and manufacturing locations.
2. Develop a separate procedure for properly managing universal waste, both domestically and, in particular, internationally. The procedure should be general yet be specific where local, regional or country requirements dictate a different standard.
3. Develop an interim plan to execute a phased approach and to identify impacts of the imposition of the new procedures in items 1 and 2. This is likely important if the imposition of international law will change management practices. The interim plan would identify the permitting and transportation issues and challenges, as well as identifying a time line.
4. Adopt a web-based tracking system for identifying and tracking battery liabilities and paperwork.

² The waste batteries (universal waste) could not have entered the US legally from Venezuela because that would require an illegal customs declaration at the time of export. Venezuela is a Basel party and as such would not have granted an export permit to the US. Interestingly, the US does not regulate the importation of universal waste except from OECD member countries until the universal waste first enters the US. This is in part because US law does not impose import/export requirements on waste that is not subject to the manifesting requirements of 40 CFR part 262, and universal waste is not subject to the manifesting requirements.

