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Good afternoon,

I'm looking for clarification regarding marking/labeling requirements to ship waste battery cells that meet the EPA's universal waste criteria per 40 CFR Part 273. I know that the intent of the EPA's universal waste ruling was to simplify the management process for commonly generated wastes such as pesticides, batteries, aerosols, mercury-containing equipment, lamps, etc, but it's still somewhat confusing where the EPA universal waste requirements end and the DOT shipping requirements start.

Here is some background information regarding the batteries in question:

- The battery cells in question use potassium hydroxide (KOH) electrolyte and are a hazardous material.
- The manufacturer's SDS for the battery cells states that the proper UN ID number is 2795 and that the proper shipping name is "BATTERIES, WET, FILLED WITH ALKALI".
- Waste battery cells are shipped to a reclamation facility to recover the useful materials for later re-use in manufacturing new battery cells.

To keep this email focused, my questions are numbered below.

1. From the Department of Transportation's perspective, is universal waste that is also a hazardous material shipped/marked/labeled as a hazardous material (as opposed to hazardous waste)?

The EPA's universal waste requirements in 40 CFR 273 delegate universal waste packaging/marking/labeling/handling requirements to the Department of Transportation. Under normal circumstances, a hazardous waste shipment would require a Hazardous Waste Manifest in accordance with 40 CFR 262. However, universal waste is exempt from Hazardous Waste Manifests per 40 CFR 261.9. This seems to imply that hazardous material that is a universal waste is intended to be shipped as a hazardous material, rather than as a hazardous waste.

- 2. Is it ever permissible to modify the proper DOT shipping name for a hazardous material to include any variant of the phrase "universal waste", such as "universal waste – batteries" or "BATTERIES, WET, FILLED WITH ALKALI (UNIVERSAL WASTE)"? My understanding of 49 CFR 172.101 is that proper shipping names for hazardous materials cannot be modified except as permitted within 49 CFR 172.101. Additionally, 40 CFR 273.52(b) explicitly prohibits modifying the DOT proper shipping name for a universal waste hazardous material to include the word "waste". Since "universal waste" refers to a broad number of hazardous materials that could each have multiple UN ID numbers and proper shipping names, it's only logical that the proper shipping name "universal waste" would not adequately indicate the hazard associated with a material.
- 3. From the perspective of the DOT, is it correct to ship/mark the hazardous material in question (universal waste battery cells) as a hazardous material without a hazardous waste manifest using the UN ID number and proper shipping name provided below?

UN2795

BATTERIES, WET, FILLED WITH ALKALI

4. Can the exterior packaging of a hazardous material shipment be marked "used batteries" in addition to the hazardous material markings required by the Department of Transportation? Assume the marking is on the packaging only and is not reflected on any of the shipping paperwork.

Universal waste type identification on external packaging or individual items is required by 40 CFR 273.14(a). Applying the label to the outside of the shipping container would be easiest, but I can label individual items instead if doing so may avoid confusion during shipping.

5. How would lithium batteries with UN ID number 3480 and proper shipping name "Lithium ion batteries" be marked/labeled for shipment to a recycling facility? Would they be shipped as a hazardous material or as hazardous waste? Would the packaging markings/labels indicate "universal waste" or "waste" in any capacity, or would the package simply be marked to reflect the UN ID number and proper shipping name?

Though the marking requirements are likely stricter for lithium batteries than for wet alkaline batteries, the overall process is analogous to what I am trying to accomplish—and I imagine you field more questions regarding lithium batteries than wet alkaline batteries. Being able to relate the lithium battery shipping process to the shipping process for our battery cells would be super helpful in understanding the overall shipping process.

Thank you very much!

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