

Lead Acid Batteries: How to Pack, Ship, and Obtain a Permit



Does your air carrier require you to have a special permit for shipping used batteries to be recycled? If so, there are two things you can do:

1. Ship your batteries with your local air carrier to Interstate Battery and use Interstate's existing permit
2. Request your own permit from DOT

To use Interstate's existing permit, contact Vern at Interstate Battery in Anchorage at (907) 349-1577. Let him know that you have batteries that you want to recycle, and tell him who your local air carriers are. Once the logistics are figured out, he will send you a copy of Interstate's permit to use for shipping the batteries. Note -- the batteries need to be properly packaged in plastic totes. See the packaging section on page 4 of this document and the notes section on page 5.

To request your own permit from DOT, follow the information in this document.

Overview

Some air carries (like Northern Air Cargo) may require you to ship used batteries in "air approved containers" because of FAA regulations. Air approved containers are specially made containers that pass DOT specifications and can be purchased through places such as freight companies. Unfortunately these containers aren't cheap (they cost from \$12-\$45 and each container only holds one battery).

If your community can't afford to purchase these containers, the good news is that you can apply for a Special Permit from DOT which allows you to use regular plastic fish totes to ship batteries (like the photo to the right). Note that if you are shipping batteries by **barge**, the regulations are less strict - you don't need a permit, and you can package batteries on wooden pallettes (shrink-wrapped) or plastic boxes/totes.



Plastic fish tote that can be used to ship batteries

How do I get a Special Permit?

Fortunately it's not too hard to get a permit and it doesn't take much time. To apply, simply write a **short "hardship letter"** to the Department of Transportation (DOT). This letter explains that you need a special permit because it is important to ship batteries out of your community, and it is difficult to pay for DOT-spec packaging for shipping the batteries.



What should the letter say?

To view a sample letter for requesting a permit, go to http://www.zendergroup.org/docs/sample_letter.pdf

If you want to write your own letter, include the following:

- ◆ The first line of the letter should state that your organization (e.g. Tribe or City) "would like to obtain party status for DOT-SP 12283. "
- ◆ Explain that you have used batteries that you must ship out of your community to be recycled or properly disposed of because your community doesn't have a safe way to dispose or store hazardous waste, and your waste disposal site is unlined.
- ◆ Explain that if you dispose of batteries in your community they can contaminate your land and water and affect subsistence and the health of the community.
- ◆ Explain that your community doesn't have the finances to purchase DOT-spec packaging.
- ◆ The letter must also include the name, address, and phone number of the contact at your organization.
- ◆ State that your organization has not previously gotten a permit.
- ◆ State that your organization will be shipping the batteries.
- ◆ State that you have read and understand the permit, which can be found at the following link:
www.phmsa.dot.gov/staticfiles/PHMSA/SPA_App/OfferDocuments/SP12283_2010080270.pdf

Where do I send the letter?

The letter may be **emailed**, **faxed**, or **mailed** to the following address:

E-mail: specialpermits@dot.gov

Mail to:

Associate Administrator for Hazardous Materials Safety
Attn: General Approvals and Permits, PHH-31
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation, East Building
1200 New Jersey Ave, SE
Washington, D.C. 20590-0001
FAX: (202) 366-3753 or (202) 366-3308

For most efficient processing it is recommended that Applications for Special Permits be submitted electronically via email.



How long will it take to hear back about the permit?

We've heard that DOT is pretty fast when issuing permits for hardship cases. We've heard of people being issued their permits as soon as a few days and as late as four weeks after DOT receives the letter. If you have email, be sure to **include your email address** in the letter because DOT can email you the permit when it's ready, and it's probably the fastest way to get it. If a couple weeks have passed after you have submitted your letter and you haven't heard anything, send them an email at Specialpermits@dot.gov or give them a call at (202) 366-4535 to ask about the status of your application.

What will the permit look like?

To view a sample permit, go to http://www.zendergroup.org/docs/sample_permit.pdf On the last page you can also view other organizations that have applied and received a permit.

What do we do with the permit when we get it?

When you receive your permit, keep the original and a back-up copy on-file. Every time you ship batteries you will need to tape a **copy** of the full permit to the outside of the packaged batteries.

How do we need to package the batteries once we get the permit?

CONTAINER REQUIREMENTS

Once you receive the permit, you will see that it contains specific packaging requirements for batteries. The batteries must be packaged in sturdy **plastic totes or plastic boxes** that don't have cracks or holes and don't leak. Many communities have extra plastic fish totes around that aren't being used. If your community doesn't have any spare totes, you can purchase totes with lids for around \$200-\$300 at the following locations. If you send your batteries through Interstate you can use their totes (see page 5 of this document for more information).

Companies that sell plastic totes

Anchorage

Arctic wire and rope 1 800 478-0707 or (907) 562 0707

Fairbanks

Arctic Fire and Safety 1 800 260-3473 or (907) 452-7806
ABS (907) 452-2002

Dillingham

BBEDC (907) 842-4370 , ask for Fritz
Johnson, insulated totes

Juneau

Western Auto & Marine (907) 780-4909

Sitka

Murray Pacific Supply 1 800 478-3171, just half totes

Ketchikan



Example of plastic totes that can be used to ship batteries



Murray Pacific Supply 1 800 478-3135, just half totes

Cordova

LFS Marine Supplies (907) 424-5495 or Toll Free in Seattle 800-647-2135 or Toll Free in Bellingham 800.426.8860

Bethel

For the Bethel area, AVCP has some totes that they can loan communities for shipping batteries to Bethel. The community will need to cover a \$50-\$60 shipping fee for getting the empty totes from Bethel to the community. AVCP also has some smaller lined cardboard boxes they can send to communities for shipping a small number of lead acid batteries (2-3 batteries will fit in a box). AVCP can assist with picking up the batteries once they arrive in Bethel to take them to NAPA. Contact Steve Street at AVCP at 907-543-7355 sstreet@avcp.org for more information.

HOW TO PACKAGE THE BATTERIES

Once you have a plastic tote/box to use, here are the recommendations for packing the batteries in the totes:

1. Place a sheet of plywood on the bottom of the tote.
2. If available in your Village, sprinkle some kitty litter on top of the plywood (kitty litter is absorbent material in case any of the batteries are leaking). Otherwise, try to use another absorbent material, such as vermiculite, or hazardous waste spill pads. (go to the end of the document at this link for where to purchase these materials www.zendergroup.org/docs/Safety_gear.pdf) or you may be able to get them from Vern at Interstate Battery (907) 349-1577).
3. Lay down a layer of batteries.
4. If you have only one layer of batteries, put enough sheets of "waffle" cardboard on top of the batteries so it reaches the top of the tote. The waffle board makes the batteries secure so they won't move around during transport. Note that it is very important that the cardboard is dry and doesn't get wet before you use it.
5. If you have a second layer of batteries, put 1-2 sheets of waffle cardboard on top of the first layer, then the second layer of batteries, then more waffle cardboard until it reaches the top of the tote (if you have it, you can use plywood at the top instead of waffle cardboard).
6. Finally, put the lid on the tote and band it with banding tape, ratchet straps or anything else that will secure the lid tight.
7. Tape a copy of the required shipping labels to the outside of the tote (you can print the labels here and fill in your name and address and where it's going) www.zendergroup.org/docs/label_battery_markings.doc
8. Tape a copy of the special permit to the outside of the tote (you can put it in a ziplock bag so it's weatherproof).
9. Fill out airline shipping forms (air way bill and shippers declaration form) - see following pages in this document for further information on this)



You can also view a step-by-step video of how to package batteries at:

www.youtube.com/watch?v=WOtqqEYjvXY

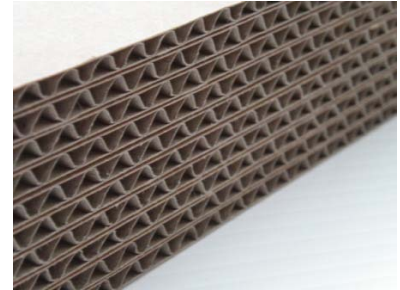


As specified in the permit, the total maximum weight of batteries per tote is 1800 lbs (not including the weight of the tote). Typical ATV and Snowmachine batteries weigh about 12 lbs and car batteries weigh about 30 to 35 lbs. Boat or truck lead-acid batteries can weigh as much as 75 lbs.

A NOTE ABOUT "WAFFLE" CARDBOARD

Waffle cardboard (also known as honeycomb cardboard) is thick, but light. Examples are shown in the photos to the right. **Waffle cardboard must be used instead of regular cardboard** when packing batteries for transport by air using the special permit. The reason is that the battery terminals may not support the weight of what's on top of them. When you use waffle cardboard, the battery terminals poke through a little-- but then the rest of the battery holds the majority of the weight from above. If you are shipping batteries to **Interstate Battery**, they may be able to **send you sheets of waffle cardboard for free**. Call Vern at Interstate at (907) 349-1577. Total Reclaim in Anchorage may be able to send you cardboard for free as well (contact 561-0544) You may also be able to purchase sheets of waffle cardboard from the battery recyclers listed on the next pages.

If you can't get any waffle cardboard, you could use flattened cardboard boxes instead --if you **place pieces of wood** on the batteries so that the cardboard sits on the wood and **not** the battery terminals.



Examples of "waffle" cardboard



SPECIAL NOTES IF YOU ARE SHIPPING BATTERIES THROUGH INTERSTATE BATTERIES

If you choose to ship batteries to Interstate, you can use their totes so you don't have to purchase your own. Call Vern at Interstate at (907) 349-1577 and let him know approximately how many batteries you have (and what types) and he will figure out the size and number of totes to send to you. Interstate requires a refundable deposit for the totes. Generally they can just send a bill for the totes and then as long you send the totes with batteries back to them within 90 days, they just cancel the bill and don't charge anything. They also don't charge anything for recycling the batteries, **but you will need to pay for the transportation charges of shipping the batteries to them in Anchorage**. If you request it, they can also include in the totes to you (free of charge), sheets of plywood, waffle cardboard, and vermiculite so you have everything you need for packaging the batteries. Once you receive the totes from Interstate, follow the packaging instructions on the prior page in this document. Vern will email or fax you a copy of their special permit and you can put it in a ziplock bag (so it's weatherproof) and tape it to the side of each tote. Also tape a copy of the required shipping labels to the outside of the tote (you can print the labels here and fill in your name and address and Interstates address (7740 Schoon St. Anchorage 99518)



www.zendergroup.org/docs/label_battery_markings.doc See the section below for the shipping forms to fill out for the airline you use. Once the batteries are ready to go, call Vern to let him know the batteries are on their way.

Shipping Forms for Batteries

You will need to fill out an Air Way Bill and a Shipper's Declaration Form for the airline that you are using to ship the batteries. If you need assistance filling these out, you can call the airline, call Vern at Interstate if you are shipping to them, call or email Zender Environmental (907 277-2111 ssebalo@zendergroup.org) or see this webpage for a list of example forms already filled out, as well as a video about how to fill out shipping forms http://www.zendergroup.org/ship_forms.html

Tips for getting free or reduced price shipping

Ask your local air carriers if they will ship the full totes out of your community free of charge, perhaps on a space available basis. If they can't, ask if they can provide a reduced rate for you. If you know of any charter flights going out empty, talk to them to see if they could take your batteries for free, or possibly for just a small load fee. You can always ask for free or reduced shipping from airlines in writing as well - see this example of a village that requested free shipping from an air carrier and the successful response.

http://www.zendergroup.org/docs/backhaul_trans_requestletter.pdf

Getting your totes back

One of the biggest problems we hear from Tribes is how to reliably get their empty totes back. Several Villages have been able to work with their air carriers to get their empty totes shipped back to them on a space available basis. In some hub cities, the local recycling organization and/or the battery recycling company has been able to help ensure that empty totes get sent back to Villages.

The most important rule is to make sure your Village name, address, and phone number is on every tote that is sent out, and the address is very visible. It could say something like "Please Return Empty Tote To Raven Village As Soon As Possible...." If you have included the kitty litter or absorbent padding, and it is still dry, ask for that back as well, so that you can reuse the liner. If you ship batteries to Interstate through Northern Air Cargo, they said they will make sure your empty totes get sent back to you.



How to safely handle and store batteries

Safety gear: Batteries should be handled with protective gear. Neoprene gloves, polyester clothes and protective eyewear are highly recommended.

Go to http://www.zendergroup.org/docs/Safety_gear.pdf for information about where to purchase safety gear, as well as spill pads to underlay the batteries.





Storage: Batteries should be stored off-the-ground and covered. Try a shed, shipping container, or fish tote. If batteries are exposed to sun, rain, or cold temperatures, they may crack and leak acid and heavy metals. **Make sure contaminants from leaking batteries cannot enter the soil or nearby water.**

Go to http://www.zendergroup.org/reuse_shed.html for further information about how to safely store batteries and other hazardous wastes.

Total Reclaim in Anchorage also sells a "backhaul kit for \$1900 plus shipping. The kit comes in a tote and includes vermiculite, spill kits, shrink wrap, and safety gear. The kit also contains boxes for fluorescent bulbs, buckets for ballasts and mercury switches, along with a copy of a backhaul manual. Contact Larry Zirkle larryz@totalreclaim.com 907.561.0544

How to contact lead-acid battery recyclers

Anchorage:

Interstate Batteries, (907) 349-1577 ask for Vern
 Battery Specialists of Alaska, 276-5531
 NAPA Auto Parts, 563-3637
 Exide Batteries, 344-1390
 Total Reclaim: 561-0544

Bethel:

NAPA Auto Parts 543-2673

Seattle:

Allied Batteries, (206) 762-5522
 Dyno Battery, (206) 283-7450

Kotzebue:

City of Kotz Landfill 995-2939 (only accepts from residents of Kotzebue)
 Maniilaq Association (ask for Stan Tomaszewski) 442-7639

Fairbanks:

ABS Alaska Battery Recycling, 452-2002
 Jackovich Industrial & Construction Supply:
 Phone 907-456-4414
 Toll Free 800-770-4414

Dillingham:

NAPA Auto Parts 842-4200

Nome

Carquest Autoparts 443 2886 (only accepts from residents of Nome). Anyone in the Nome/Kawerak region can contact Anahma Shannon (Kawerak Backhaul Specialist) and arrange for battery backhaul from your community. 443-4249 backhaul@kawerak.org

Who can I contact if I have any questions?

You can contact the **US DOT Special Permits Office** directly at
 Tel: (202) 366-4535, Fax: (202) 366-3753 or (202) 366-3308, Email:
Specialpermits@dot.gov

You can also contact **Mark Smith at Northern Air Cargo**. Mark is very friendly and knows a lot about obtaining these types of permits. You can call him at (907) 249-5186 to ask him any questions about getting these permits, or general questions about shipping batteries.





You can contact **Vern at Interstate Battery** at (907) 349-1577 to arrange shipment or pickup of batteries.

You can also contact **Zender Environmental** at (907) 277-2111 if you have any other questions about recycling/disposing of batteries.

Website resources

Backhaul Resources	http://www.zendergroup.org/backhaul.html
Battery Packaging Video	http://www.zendergroup.org/backhaul_videos.html http://www.youtube.com/watch?v=W0tqEYjvXY
Battery Resources	http://www.zendergroup.org/battery.htm
Printable Shipping Labels	http://www.zendergroup.org/labels.html
Forms for Shipping Batteries	http://www.zendergroup.org/ship_forms.html
Counting Your Battery Wastestream	http://www.zendergroup.org/docs/battery_counting.pdf
What To Do With Household Batteries	http://www.zendergroup.org/docs/battery_household.pdf
Household Battery Summary	http://www.zendergroup.org/docs/battery_table.pdf
EPA Battery Recycling website	www.epa.gov/epawaste/consERVE/materials/battery.htm#batteryrecycle
Rechargeable Battery Recycling Corp.	http://www.rbrc.org/call2recycle/

To read more about the relevant regulations:

Application for Party Status for Hazardous Materials CFR 49 §107.107

<http://cfr.vlex.com/vid/107-application-for-party-status-19943226> Or

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=a40cdb1d8bdd0356d08af52b069481ab&rgn=div8&view=text&node=49:2.1.1.3.2.20.3&idno=49>

Non-bulk Packaging for Hazardous Materials (Wet Batteries such as lead-acid vehicle batteries)

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div5&view=text&node=49:2.1.1.3.8&idno=49-49:2.1.1.3.8.5.25.2>