

DATE: August 18, 1995

TO: SAT/SSC/RRC Managers
and Supervisors



FROM: Development Operations Training

SUBJECT: BATTERY RECYCLING

Attached is the latest procedure for the accumulation and disposal of various battery types.

Please review with your staff.

Thank you.

cc: S. Camulli
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Zone Managers

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Section B - reserved for future programs

SONY SERVICE FACILITY
ENVIRONMENTAL PROCEDURES

Date: 3/15/95
Revision:

RECHARGEABLE BATTERY RECYCLING

SSCs should encourage customers to leave their waste rechargeable batteries at the SSC so they will be recycled and not enter the municipal waste stream. There are three types of rechargeable batteries that will be collected: Nickel (Nickel cadmium - NICAD and Nickel Metal Hydride - NiMH), Lead Acid and Lithium Ion.

It is very important that these batteries be identified (see attached list), sorted, stored and processed separately. This is imperative as not to contaminate the recycling process. This will require three separate, well labelled collection containers.

BATTERIES THAT CONTAIN NICKEL (NICAD and NiMH)

SET-UP PROCEDURE

1. Identify one central location to collect batteries.
2. Label box or container "NICAD AND NiMH BATTERIES ONLY"
3. Place NICAD/NiMH battery log sheet near shipping area (see attached)

PROCEDURE

1. Collect batteries in the designated NICAD container. It is very important that only NICAD and NiMH batteries be collected in this container. Place a leaking battery in a plastic bag prior to placing in container. The recycler will return the whole shipment to you if there are non-NICAD/NiMH batteries in the package. If you have any questions on battery type, refer to the attached list.
2. Once a month count and weigh the collected NICAD/NiMH batteries.
3. Place batteries in cardboard box (if filler is needed use any paper or newspaper). *Do not use any polystyrene material or bubble wrap.* NICAD stick-on labels will be supplied so you can place on the outside of the box (lower left corner on front of box).
4. Log the date, quantity, weight and name of handling person on the log sheet.
5. Ship the batteries via UPS to:

INMETCO
245 Portersville Road
Ellwood City, PA 16117
Attn: Receiving Dept. (NICAD Batteries)
SSC ID No. XX

For tracking purposes, it is mandatory that you put your SSC ID number on the outside of the package (on label). Your SSC ID number is the same as the location code in the parts system (see attached list).

6. Each month facilities will receive a list via fax of shipments made. This will show the facility, the date and weight received by INMETCO. Check your shipped quantity against their received quantity.
- If they did not receive the batteries, you must do a tracer and locate the shipment.
 - If their quantity is lower, some batteries or part of the shipment may have been lost or separated.
 - If their weight is higher, we may have been overcharged.
 - If there are no discrepancies, continue as usual.

If any of the above situations occur (6a, 6b or 6c), please notify Jayne Vicelich at (201) 930-6883 to assist with the resolution.

BATTERIES THAT CONTAIN LITHIUM ION

SET-UP PROCEDURE

- Identify one central location to collect batteries.
- Label box or container "Lithium Ion Batteries Only - NO BUTTON CELLS"
- Place Lithium Ion battery log sheet near shipping area (see attached)

PROCEDURE

- Collect batteries in the designated Lithium Ion container. It is very important that only Lithium Ion batteries be collected in this container. Place a leaking battery in a plastic bag prior to placing in container. Lithium button cells or batteries containing metallic lithium are not to be placed here. If you have any questions on battery type, refer to the attached list.

- You will be notified by June 1, 1995 of the shipping address (via UPS).

BATTERIES THAT CONTAIN LEAD

SET-UP PROCEDURE

- Identify one central location to collect batteries.
- Label box or container "LEAD BATTERIES ONLY"
- Place Lead battery log sheet near shipping area (see attached)

PROCEDURE

- Collect batteries in the designated Lead Battery container. It is very important that only lead batteries be collected in this container. Place a leaking battery in a plastic bag prior to placing in container. The recycler will return the whole shipment to you if there are non-lead batteries in the package. If you have any questions on battery type, refer to the attached list.
- Once a month count and weigh the collected lead batteries.

3. Place batteries in cardboard box (if filler is needed, use any paper or newspaper). *Do not use any polystyrene material or bubble wrap.* Lead Battery stick-on labels will be supplied so you can place on the outside of the box (lower left corner on front of box).
4. Log the date, quantity, weight and name of person handling on the log sheet.
5. Ship the batteries via UPS to:
 - It is not a hazardous material.
 - Shipping name: "Consumer type batteries (contains lead)"
 - Ship to: Doe Run Company
Highway KK
Boss, Missouri 65440
 - Schedule shipment by first contacting either:
Lou Magdits (800) 633-8566 or
Vickey Abney(800) 633-8566

For tracking purposes, it is mandatory that you put your SSC ID number on the outside of the package (on label). Your SSC ID number is the same as the location code in the parts system (see attached list).

6. Each month facilities will receive a list via fax of shipments made. This will show the facility the date and weight received by Doe Run. Check your shipped quantity against their received quantity.
 - a) If they did not receive the batteries, you must do a tracer and locate the shipment.
 - b) If their quantity is lower, some batteries or part of the shipment may have been lost or separated.
 - c) If their weight is higher, we may have been overcharged.
 - d) If there are no discrepancies, continue as usual.

If any of the above situations occur (6a, 6b or 6c), please notify Jayne Vicelich at (201) 930-6883 to assist with the resolution.

PACKAGING, LABELING & SHIPPING DEFECTIVE BATTERIES FOR ENGINEERING ANALYSIS

Defective sealed nickel cadmium, nickel metal hydride, lead acid cells and lithium ion batteries that are being shipped for engineering analysis can be shipped via common carrier with only a few requirements imposed. Since the spent battery is not being discarded nor intended to be discarded, it is not subject to hazardous waste transportation regulations. In addition, the Department of Transportation (DOT) has recognized that small, sealed batteries do not pose a transportation risk if their casing is intact. The exemption can be found in 49 CFR 173.159(d). With the exception of leaking batteries, the batteries can be shipped using basic care in packaging. Leakers must be given special attention to proper packaging. Depending on the size of the battery, a leaker might trigger the need for a hazardous material bill of lading.

NiCD and NiMH Not Leaking

- 1) Place securely in cardboard box. If more than one is being shipped, they must be packed in order to prevent short circuiting.
- 2) Ship normally. A *hazardous material* declaration is not necessary.
- 3) Ship via any common carrier. UPS or Federal Express are acceptable.

NiCD and NiMH Leaking

- 1) Double seal leaking batteries in 2 plastic bags prior to placing securely in cardboard box. Use fill material that would absorb any leaking fluid to cushion them.
- 2.a) A *hazardous material* declaration is not necessary if the electrolyte is less than 1 ounce. If so, the package can be shipped normally with additional wording on the outside "This package conforms to conditions and limitations set forth in 49 CFR 173.4."
- 2.b) If the electrolyte volume exceeds 1 ounce, then a *hazardous materials* declaration is necessary. The following will help you fill in the blanks on the declaration:

Proper shipping name: Batteries, wet, filled with alkali, electric storage
Hazard class: 8
Identification number: UN 2795
Packing Group: PG III
Attach a "CORROSIVE" label

- 3) Ship via any common carrier that will handle small hazardous materials. UPS or Federal Express are acceptable.

Lithium Ion

- 1) Place securely in cardboard box. If more than one is being shipped, they must be packed to prevent short circuiting. Double wrap leaking batteries in 2 plastic bags prior to placing in container.
- 2) Ship normally. A *hazardous material* declaration is not necessary. Do not write "lithium ion" anywhere on the package or shipping paper to avoid the confusion commonly associated with the other lithium battery types that are chemically reactive.
- 3) Ship via any common carrier. UPS or Federal Express are acceptable.

**Lead Acid
Not Leaking**

- 1) Place securely in cardboard box. If more than one is being shipped, they must be packed in order to prevent short circuiting.
- 2) Ship normally. A *hazardous material* declaration is not necessary.
- 3) Ship via any common carrier. UPS or Federal Express are acceptable.

**Lead Acid
Leaking**

- 1) Double seal leaking batteries in 2 plastic bags prior to placing securely in cardboard box. Use fill material that would absorb any leaking fluid to cushion them.
- 2.a) A *hazardous material* declaration is not necessary if the electrolyte is less than 1 ounce. If so, the package can be shipped normally with additional wording on the outside "This package conforms to conditions and limitations set forth in 49 CFR 173.4."
- 2.b) If the electrolyte volume exceeds 1 ounce, then a *hazardous materials* declaration is necessary. The following will help you fill in the blanks on the declaration:

Proper shipping name: Batteries, wet, filled with acid, electric storage
Hazard class: 8
Identification number: UN 2794
Packing Group: PG III
Attach a "CORROSIVE" label
- 3) Ship via any common carrier that will handle small hazardous materials. UPS or Federal Express are acceptable.