### **GENERAL**

SAFETY is of principle concern to our Primes. Loads must be free of any potential safety, hygiene or environmental hazards. Loads which contain any of the following will be subject to rejection and immediate shipper disqualification:

Explosives Fertilizers Hypodermic Needles
Live Ammunition Aerosol Cans Medical Wastes

Casoline Free Lead

Gasoline Butane Lighters Free Lead Propane Bottles Radioactive Sources Batteries

**Unidentifiable Materials** 

In addition, UBC shipments which contain the following contaminants will be subject to rejection:

Dirt Paper Foil

Sand Wood Bottle Caps

Glass Plastic Steel

Any aluminum items other than UBC such as foil, pie plates and formed containers are unacceptable due to excessive melt loss. However, aluminum food cans which are clean, dry, and free of paper labels are allowable interspersed throughout the bale. Any load arriving with pests, such as insects or rodents, will be subject to rejection.

Shipments with moisture in excess of 4% will be subject to weight deductions or rejection. The deduction will equal the tested moisture percent minus 2%. For example, if the tested moisture is 5% the deduction equals 5% less 2% or 3%. If the tested moisture is equal to or less than 4%, no deduction will be taken.

## **SCRAP PREPARATION**

#### AT YOUR PLANT

The ideal processor achieves the quality expectations of our recycling primes by maintaining a high quality processing stream for their UBCs, including use of appropriate baling/densifying equipment, storing processed or unprocessed UBCs in a clean and dry area, and by keeping their employees up to date on the requirements of the industry.

### **ENCLOSED RECEIVING AREA**

All processors should maintain UBC receiving areas to minimize moisture and dirt. UBCs should be dry and stored indoors before, during and after processing. Or densified material should be stacked in such a way as to prevent contact from surface water. Loads covered with ice and snow will be rejected.

#### **SCALE**

Received weights remain the prevailing source of payment, however, a well maintained scale can help the processor determine whether densities are within the industry limits or detect the presence of heavy non-UBC material. Maintaining scale measurement capability should be a routine maintenance item on each processor's list.

# MATERIAL HANDLING EQUIPMENT These Items Are A Must

- Magnetic Separation: Whether baled or densified, all processors should have magnetic separation units in place which are regularly checked for magnetic strength. Any load which indicates an absence of magnetic separation could result in a disqualification.
- Screens: Many contaminants are so small they easily fall through the screens. Metal screens placed prior to baling/densifying equipment are most effective. Moisture may also be reduced if cans are shaken over a screen or inside a trommel prior to processing.

#### **TRACEABILITY**

Developing a quality product requires increased accountability on the part of UBC suppliers. Processors need to identify sources of contamination from their suppliers. Knowing which supplier's material is in a bale or truckload will help determine the source of any contamination. Learning more about our suppliers, their operations and their sources of cans can be a significant help in maintaining high quality.

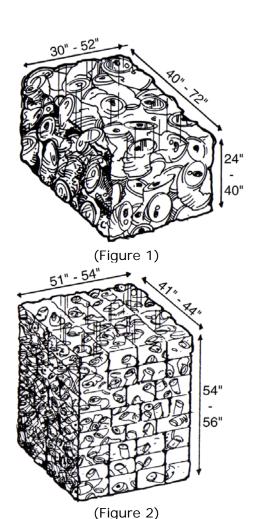
## TRAINING PROGRAMS

Experience indicates all employees are willing to make the effort to produce a quality product. Effective training programs covering industry expectations have the potential to create remarkable improvements in quality.

#### **PLANT VISITS**

Our Primes encourage supplier visits (by appointment only). Talk to your market manager for more details.

#### **SPECIFICATION AND PROCEDURES**



UBC material must be baled or densified and should not contain shredded material. Specifications are as follows:

#### DENSITY

#### Bales

Acceptable bale densities are 14 to 22 pounds per cubic foot. All bales must be dense enough to allow safe movement by a forklift truck. (Figure 1)

#### Densified

Acceptable density ranges are 35 to 45 pounds per cubic foot with biscuit dimensions in inches in the following ranges: 10 to 13 x 10.25 to 20 x 6.25 to 9 (Figure 2). Not to exceed 50 lbs.

Density Calculation:

Length (in inches) X
Height (in inches) X
Width (in inches) / 1728 =
Total Cubic Feet.

Weight of Bale or Biscuit (in pounds) / Total Cubic Feet = Density (in pounds) per Cubic Foot.

## Strapping/Banding

Banding should be sufficiently tightened to secure the material but not so tight as to be embedded or produce a springing action when banding is cut. Excessive wire beyond the binding twist (pigtails) or banding beyond the clamp or crimp are not acceptable as they create a safety hazard when being cut by the shredder crews.

It is imperative that no wrapping of any kind be used in shipping UBCs (bales or densified material) to our Primes. Any load containing such wrap will be subject to rejection. Shipments on pallets are unacceptable and will be subject to rejection.

The following additional requirements pertain to each commodity:

#### **BALES**

Bales must be at least 30 cubic feet with dimensions in inches in the following ranges: 24 to 40 x 30 to 52 x 40 to 72. The integrity of the bales must be such that they can be safely stacked for storage.

A maximum of six 5/8" x .020" steel bands or a maximum of six (6) #13 gauge steel wires is required. Insufficient, additional or embedded banding is not acceptable and will be subject to rejection.

#### **DENSIFIED**

All biscuits comprising a bundle must be of uniform size. Acceptable bundle range dimensions in inches are 41 to 44 x 51 to 54 x 54 to 56. The integrity of the bundles must be such that they can be safely stacked for storage.

Bundles are to be banded with a minimum of 5/8" x .020" steel straps. One vertical band per column and a minimum of two girth (horizontal) bands per bundle required.

## **Loading Specifications**

## **Guidelines For Loading Trucks and Piggybacks**

Our Primes are responsible for freight. Minimum truckload weights are required as follows:

Bales: Minimum = 40,000 pounds
 Densified: Minimum = 40,000 pounds

Densified bundles and bales may be mixed in a trailer. The material should be segregated within the trailer. Bundles are not to be stacked on bales and visa versa.

Any Prime-arranged truckload picked up and found to contain less weight will be assessed a penalty up to 8 cents per pound applicable on the amount of weight below the established minimum. The purpose of this penalty is to compensate for freight costs incurred when truckload capacity is not optimized.

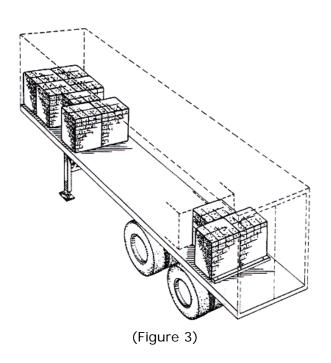
All UBC scrap must be loaded in standard dry vans with barn doors within 2 hours of a truck's arrival. After 2 hours, detention will be charged (charges vary by trucking company). Our transportation partners will provide either 48- or 53-foot trailers (if requested and available) for loading. While the carriers are continually maintaining and upgrading their equipment, it is possible that a trailer could arrive that is in need of repair. The shipper is responsible for inspecting all trailers. The trailer must be clean, in good shape and free of holes. Equipment provided not meeting these requirements should be refused and a replacement requested.

A minimum clearance of 6 inches must be left between the top of the load and the lowest point of the trailer roof (usually the door). Any trailer that cannot be readily unloaded due to minimum clearance will be subject to rejection.

All charges relating to rejected scrap, including freight charges, will be the responsibility of the vendor.

In the case of piggyback, no more than 45,000 pounds of product should be loaded in the trailer. The nature of intermodal piggyback is such that heavier power units may move the trailer at the delivery of the movement. This could create a situation where maximum allowable gross weights would be exceeded resulting in fines and dangerous situations.

When shipping from CA, OR, WA, AZ or NV, a copy of the shipper Bill of Lading or packing list must be affixed to the inside rear trailer wall. Do not give the consignee copy to the driver picking up the load as he/she will not be the one delivering the load and the result will be lost documentation. Loads arriving without documentation will be charged \$200.



The bales should be loaded with the largest face on the floor. If the length prevents side-by-side loading of the bales, load with the longest side parallel to the side of the trailer or a combination of perpendicular and parallel to maximize the utilization of the inside dimensions of the trailer, while allowing for secure transit and safe loading and unloading. Bales loaded on end are not acceptable.

When shipping biscuits, weights sometimes require that single bundles be loaded. These should be not be loaded immediately at the nose or the rear of the truck but rather behind or ahead of a complete row (Figure 3).

In all cases, the driver is the one ultimately responsible for ensuring that his/her load is safe and has the last word in ensuring that his payload is distributed evenly for legal scaling.

## **Guidelines for Loading Railcars**

The name of the railway serving the origin location is required for each new shipper. For each shipment, the shipper is responsible for securing equipment from the railroad. In order to obtain a release number from A-BRC, the shipper must provide the railcar and seal numbers.

All shipments will be FOB destination. In all cases, the rail routing used on the Bill of Lading must be provided by the Prime. The rail Bill of Lading must bear the following information:

- Release Number
- Name
- City
- State
- Date of Shipment
- Contract Number
- Seal Number
- Type of Product
- Number of Pieces
- Description: "SCRAP ALUMINUM FOR REMELTING PURPOSES ONLY"
- Certification: "THIS SHIPMENT IS BEING TRANSPORTED FOR THE PURPOSE OF RECYCLING AS DEFINED IN THE APPLICABLE TARIFFS CONTAINING SUCH PROVISIONS," and
- Freight Bill Payments Address: (To the appropriate customer)

Where our Prime is responsible for freight, minimum carload weights are required to be:

Bales: Minimum = 83,000 pounds
 Densified: Minimum = 110,000 pounds

Any railcar shipped and found to contain less weight will be assessed a penalty up to 8 cents per pound applicable on the amount of weight below the established minimum. The purpose of this penalty is to compensate for freight cost incurred when the carload capacity is not optimized. All charges relating to rejected scrap, including freight charges, will be the responsibility of the vendor.

Standard boxcars with a MINIMUM 10-FOOT DOORWAY AND A MINIMUM HEIGHT OF 9 FEET 6 INCHES with double doors must be used for both baled or densified UBCs. The outside door at which the car was loaded must be placarded with a sign indicating "UNLOAD FROM THIS SIDE." Such placarding will enable the delivering railroad to place the car properly allowing the unloading crews the easiest access to the UBCs. A copy of the shipper's Bill of Lading or packing list must be attached to the inside car wall closest to the door bearing the placard. DO NOT ATTACH THE BILL OF LADING OR PACKING LIST TO A BALE OR BUNDLE as it may not be seen. Attaching the Bill of Lading to the wall is the only way to ensure we will get your paperwork. Railcars arriving without paperwork will be charged \$200.

It is the shipper's responsibility to inspect all railcars prior to loading. All boxcars must be clean and free of any foreign material. Boxcars arriving and found to contain any unidentifiable material will be subject to rejection. Bulkhead pinholes should be cleaned to ensure proper securing of bulkheads (if applicable). All boxcars must be free of holes, in good shape and safe for movement. Any car found to be otherwise must be refused and a replacement car requested.

In the ends of the boxcar, bales or bundles should rest on their largest face. The longest dimension of either bale or bundle must be horizontal and perpendicular to approaching truck forks. Bales loaded on end are not acceptable. Any loads arriving with bales on end will be subject to rejection. Load doorway bales or bundles with the longest side dimensions parallel to the railcar sides.

Any voids must be filled with adequate bracing to prevent load shifting. **A minimum 12-inch clearance** is required between the UBC and the top edge of both doorway frames. The material should not be jammed into the car. Loading should be snug but not tight.

All bales/bundles must be loaded directly onto the car floor and not onto pallets.

Densified bundles and bales may be mixed in a rail car. The material must be segregated and not intermixed. Within the rail car, bundles are not to be stacked on bales and visa versa.

## **Unloading Specification**

## Security Check In and Out

The driver must arrive with a Bill of Lading and/or packing list. If the SRA number the driver provides is different from the paperwork, the driver will be required to contact his/her dispatcher to have the problem corrected.

The appointment time will be verified. If the appointment is for a different date, then the load will be refused and the driver given instructions to either return at his correct appointment time or have the delivery rescheduled.

The trailer number will be verified against the Bill of Lading. If it is different, the actual number will be recorded on the paperwork.

The trailer will be given a visual inspection for any structural problems that may result in safety hazards to our Primes.

All drivers are required to have and wear Personal Protection Equipment (PPE). If any driver does not have the required PPE, it will be provided to him/her and is to be returned upon departure.

#### **Driver Safe Area**

All drivers are to remain in the designated driver safe area or where instructed by the unloading crews.

## **Quick-Reference Guide**

•	Quick-Reference Guide		
	<ul> <li>Size 24 to 40 x 30 to 52 x 40 to 72 inches</li> <li>Density: 14 to 22 pounds per cubic foot</li> <li>Maximum of six (6) 5/8" by .020" steel bands or a maximum of #13 gauge steel wires</li> <li>Bands/wires must not be embedded</li> <li>A 2.5 pound per bale deduction is taken for banding</li> <li>Stackable</li> <li>No bales on end</li> <li>Truckload minimum weight is 40,000 lbs. or up to an 8 cents per pound deficient weight penalty</li> <li>Rail minimum weight is 83,000 lbs. or up to a 8 cents per pound deficient weight penalty</li> </ul>		
Credit Weight	Receiving facility's scale weight less deductions		
Customer Deliveries	1.0 cent per pound freight allowance		
Densified	Biscuit size is 10 to 13 x 10.25 to 20 x 6.25 to 9 inches Bundle size is 41 to 44 x 51 to 54 x 54 to 56 Density is 35 to 45 pounds per cubic foot Banding one (1) vertical band per column with a minimum of two (2) girth bands per bundle with a minimum 5/8" x .020" steel straps A 7-pound per bundle deduction will be taken for banding Truckload minimum weight is 40,000 lbs. or up to an 8 cents per pound deficient weight penalty		
•	<ul> <li>Rail minimum weight is 110,000 lbs. or up to an 8 cents per pound deficient weight penalty</li> </ul>		
Density Calculation	<ul> <li>Length (in inches) X Height (in inches) X Weight (in inches) / 1728 = Total Cubic Feet</li> <li>Weight of Bale or Biscuit (in pounds) / Total Cubic Feet = Density (in pounds) per Cubic Foot</li> </ul>		
Food Cans	• Must be clean, dry, interspersed and free of paper labels		
Fumigation	<ul><li>Maggots: CB Total Release Insecticide with Vapona</li><li>Fruit Flies or Bees: CB-580 Fogger with Pyrethrin</li></ul>		
Moisture	Greater than 4% charged back to 2%		
Piggyback	<ul> <li>Maximum weight of 45,000 lbs. of product in trailer</li> <li>6-inch top clearance</li> <li>Bill of Lading required</li> <li>Affix Bill of Lading or packing list to inside rear trailer wall</li> </ul>		

## Rail Shipments

- Standard boxcars with minimum 10-foot doorway and 9 feet 6 inch height
- 12-inch top clearance
- Bale minimum is 83,000 lbs. or up to a 8 cents per pound deficient weight penalty
- Densified minimum 110,000 lbs. or up to a 8 cents per pound deficient weight penalty
- Bill of Lading must bear statement: "Scrap Aluminum for Remelting Purposes Only" Certification: "This shipment is being transported for purpose of recycling as defined in the applicable tariffs containing such provisions"
- Railcar to be placarded with "UNLOAD FROM THIS SIDE"
- Copy of Bill of Lading attached to the inside car wall closest to door bearing the placard

## Rejection

- Does not meet the Prime's requirements; the plant cannot use
- Freight is to be paid by the shipper

## **Truck Shipments**

- Standard 48- or 53-foot vans with barn doors
- 6-inch top clearance
- Bill of Lading required
- Minimum weight is 40,000 lbs. for bales and 40,000 lbs. for densified

#### **UBC**

- Used Beverage Containers
- Clean, dry and free of contaminants or other materials, including radioactive material, non-UBC aluminum, other metals, dirt, paper, plastic, bottle caps, glass, wood or other foreign substances
- Material must be baled or densified per our Can Recycling Product Specifications
- No pallets, shrink wrap or cardboard wrapping





## Novelis UBC Quality Down Grade Scoring Deductions based on each load (effective April 1, 2008)

	DEDUCTION POINTS -	5-00-15-10-1	
QUALITY NAME	100 POSSIBLE	DESCRIPTION	
DIRT/SAND			
HIGH	50	½ CUP OR MORE	
MEDIUM	40	1/4 TO 1/2 CUP	
GLASS			
HIGH	50	½ CUP OR MORE	
MEDIUM	40	1/4 TO 1/2 CUP	
PAPER			
HIGH	50	21 OR MORE PIECES	
MEDIUM	40	11-20 PIECES	
HEAVY PLASTIC			
HIGH	50	11 OR MORE PIECES	
MEDIUM	40	6-10 PIECES	
LIGHT PLASTIC			
HIGH	40	21 OR MORE PIECES	
MEDIUM	30	11-20 PIECES	

## Novelis UBC Quality Down Grade Scoring Deductions based on each load (effective April 1, 2008) (cont'd.)

	DEDUCTION POINTS -	
CONTAMINANTS	100 POSSIBLE	DESCRIPTION
NON-UBC (IRON, STEEL, ALUMINUM)		
HIGH	50	11 OR MORE PIECES
MEDIUM	40	6-10 PIECES
INFESTATION (MAGGOTS/FLIES)	31	
BUTANE LIGHTER	31	
UNIDENTIFIED SUBSTANCE/TRL	50	
AFTER PROCESSING/EQUIPMENT DOWNTIME	100	
HAZARDOUS		
FILLED AEROSOL CANS	100	
AMMUNITION	100	
FERTILIZER	100	
FULL CONTAINERS OF LIQUID	100	
GAS CYLINDERS	100	
FREE LEAD	100	
HYPODERMIC NEEDLES/OTHER MEDICAL WASTE	100	
RADIOACTIVE MATERIAL	100	
LOADING/SAFETY		
CLEARANCE AT DOOR LESS THAN 6"	21	
IMPROPER BLOCKING/BRACING	21	
LOADING PATTERN	21	
TRAILER/RAILCAR CONDITION	21	
VISIBLE MOISTURE	21	
EXCESSIVE OIL	21	
PACKAGING		
CARDBOARD AND/OR SHRINK WRAP	21	
EMBEDDED/EXCESSIVE WIRES	21	
PALLETS AND/OR PALLETS WITH PADDING	21	
PALLET WEIGHT	21	
SIZE OFF-SPEC	21	
OTHER	21	

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