



Los Angeles County
Department of Regional Planning



Planning for the Challenges Ahead

Jon Sanabria
Acting Director of Planning

April 1, 2010

TO: Wayne Rew, Chair
Pat Modugno, Vice Chair
Leslie G. Bellamy, Commissioner
Esther Valadez, Commissioner
Harold V. Helsley, Commissioner

FROM: Andrew Svitek *AS*
Regional Planning Assistant II
Zoning Permits II Section

SUBJECT: PROJECT NO. R2008-01962-(2)
CONDITIONAL USE PERMIT NO. 200800163

April 14, 2010; AGENDA ITEM NO. 7

PROJECT BACKGROUND

This agenda item is a Conditional Use Permit application to authorize the operation of a scrap metal sorting yard on a vacant industrial parcel at 9113 S. Alameda St. located in the M-2 (Heavy Manufacturing) Zone in the Firestone Park Zoned District within the Florence-Firestone Community Standards District. The Commission first heard this case on December 9, 2009 and all Commissioners were present. The case was continued to February 10, 2010 and all Commissioners were present.

PROJECT ISSUES

The primary issue with this case is whether the site is sufficiently large to accommodate all the features necessary for the legal operations of a ferrous recycling yard and whether the applicant has met the Burden of Proof for Conditional Use Permits in Section 22.56.040, specifically Section 22.56.040(B) "That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area."

At the prior public hearing, staff had requested a continuance to allow additional time for the applicant to submit an operations plan and to resubmit a revised site plan that would provide additional information regarding the required storage and operational areas and address internal traffic circulation.

ADDITIONAL MATERIALS

Additional application materials have been submitted by the applicant and are included with this memorandum. Additional public comments have been received since the date of the last public hearing and are also included. The following items are enclosed:

1. An Operations Plan submitted by the applicant via email by Alex DeGood, Attorney for the applicant dated April 1, 2010.
2. A revised site plan and traffic flow diagrams submitted by the applicant via email from John Rodriguez dated March 24, 2010.
3. Email from a Det. Dave Chapman of the Los Angeles County Sheriff's Department dated February 4, 2010 regarding traffic conditions is being enclosed.
4. Letter from Greg Williams of Williams Recycling dated February 10, 2010 (with 5 exhibits). *Clarification: This letter was received after the time of the public hearing and was not presented to the Commission at the February 10 public hearing.*
5. Email from Gary Weisenberg of Atlas Iron and Metal Co. dated April 1, 2010.
6. Letter from Robert Ciaccio, Attorney for Williams Recycling dated February 12, 2010 (w/ attachment - emails by Lisa Eckert and Tam Wu).
7. Email from Mona Howerton dated March 22, 2010 re: demonstration of scrap handling (w/ attachment and Exhibits 1-10).
8. Email from the applicant John Rodriguez (w/ attachment) re: answers to DPW questions) dated March 24, 2010.
9. Email from Mona Howerton of Williams Recycling (w/ attachment – letter from Greg Williams dated 30, 2010 including Exhibit A and Scrap Metal Specifications Circular) re: applicant's answers to DPW questions dated March 30, 2010.

STAFF EVALUATION

Staff (DRP and DPW) is evaluating the revised site plan and the applicant's proposed Operations Plan and will prepare recommendations prior to the public hearing.

Should you have any additional questions prior to the public hearing, **Andrew Svitek** can be reached at (213) 974-6435 or via email at ASvitek@planning.lacounty.gov.

Svitek, Andrew

From: DeGood, Alex [amd@jmbm.com]
Sent: Thursday, April 01, 2010 12:33 PM
To: Svitek, Andrew; John Rodriguez
Subject: RE: CUP R2008-01962 / 9113 S. Alameda Street, Los Angeles (Co.)
Attachments: Operations Plan.DOC

Andrew -

Operations plan is attached as a Word document. Please let me know if you can't open it. Thank you.

Alex DeGood
JMBM | Jeffer, Mangels, Butler & Marmaro LLP
1900 Avenue of the Stars, 7th Floor
Los Angeles, California 90067

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Personnel

Flagman:

- When the yard is at full capacity, a flagman will be sent outside the gate.
- The flagman will reject any load that is trying to enter Statewide Metals' facility/yard.
- Only after the capacity number has dropped and flagman has given okay will the trucks will be accepted again.
- Help direct the flow and flow rate of trucks in the yard.
- Assist in small maintenance and daily yard clean-up.

Scale Clerks:

- Document loaded and unloaded trucks weighed on scale.
- Function as a direct liaison with the customers and will have the power to refuse any customer that does not show valid documentation and information.
- Distribute a "Weight Slip" to each customer.
- Process payments, which are by check only, with the use of a computer program.
- Record and maintain daily, weekly, monthly and annual records of each transaction.
- Assist in daily office operations.
- Assist in daily office clean-up.

Traffic Operators:

- Supervise the traffic flow in Statewide Metals' yard.
- Direct trucks to each stage and location.
- With the use of a hand-held counter: document the number of vehicles that have entered Statewide Metals' yard each day and record that information in a specified "vehicle log."

-Assist with necessary maintenance and daily yard clean-up.

Load/Product Inspectors:

-Inspect the load(s) to see if in the load(s) there are any:

a) Products that Statewide Metals does not buy and/or

b) Non- recyclable products

For Example: Rubber tires.

-Inspect the load(s) to determine the grade of the load(s).

-Signs the "Weight Slip."

-Assists with traffic flow.

-Assists with necessary maintenance and daily yard clean-up.

Excavator and John Deere Operators:

-Operate the Excavator Cat-320 and/or John Deere 260

-Preserve the machinery with daily maintenance.

-Maintain the appearance of the "Dump Area."

-When needed, will assist with the inspection of loads.

-When needed, will assist with traffic flow.

-Assist with necessary maintenance and daily yard clean-up.

Facility Supervisor:

-Supervise all departments.

-Supervise all daily operations.

-Authorized to both hire and terminate Statewide Metals' staff.

-Serves as a direct liaison with buyers.

Equipment/Security/Safety

Equipment:

- Statewide Metals will have one (1) Cat-320 Excavator, 12.00'x 13.00'
- Statewide Metals will have one (1) John Deere 260 Series 2, 7.00'x 13.00'
- Statewide Metals will have one (1) Loading ramp, 8.00'x 26.00' (non-moving)

John Deere:

- The John Deere 260 will be used for loading and moving newly dropped product to "Excavator Staging Area." The John Deere 260 will be located near the NW section of the yard. After the product has been dropped, the John Deere 260 will scoop and push the product to the "Excavator Processing Area."
- The John Deere 260 will do closed-container rear loading. Using a "loading ramp," the John Deere 260 will grab the product from the pile and load from the rear of a closed container.

Excavator:

- The Cat-320 Excavator will be located near the south wall of the "Dump Area."
- The Cat-320 Excavator will be used for loading and piling metals.
- The Cat-320 Excavator will receive newly dropped product from the John Deere 260 and make a planned pile in the "Dump Area."
- The Cat-320 Excavator will do End Dump top-loading. Therefore, the Excavator will grab the product from the pile and load it into the End Dump container, loading from top of container. This will be done parallel to the SE wall of the designated "Dump Area."

Security:

- Statewide Metals has installed nine (9) security cameras. Each camera records digitally 24 hours a day and does the following:
- Six (6) cameras focus on different sections of the property.

- One (1) Camera focuses directly on the seller's face.
- One (1) camera focuses directly on the license plate of the seller.
- One (1) camera focuses directly on the seller's vehicle.
- Copy of a thumbprint and drivers license for all new customers will be requested prior to purchasing their load.
- Copy of license plate and address for all new customers will be requested prior to purchasing their load.

Safety:

- When in or around moving equipment, cars, and/or trucks, all employees must wear a hard hat at all times.
- When in or around moving equipment, cars, and/or trucks, all employees must wear protective goggles at all times.
- Employees must be visible either by reflector vest or work gear.
- Fire extinguishers will be placed inside the office and throughout the yard.

Equipment Maintenance/Fueling

-If a piece of equipment (e.g. Excavator and/or John Deere) becomes inoperable or is in need of general maintenance, Statewide Metals will do one of two following things:

1) By appointment only, have the equipment picked up and sent to a mechanic for Off-Site maintenance/repair.

Or

2) Do On-Site maintenance/repair. (For Example: lubricating and oiling)

i. On-site maintenance for the Cat 320-Excavator will be done at the location of the proposed placement of Excavator. The Excavator will be parked and worked on at the West wall.

ii. On-site maintenance for the John Deere 260 will be done in the proposed placement of the John Deere 260. The John Deere 260 will be parked and worked on at the NW corner of the property.

Fueling:

- Statewide Metals will contract General Petroleum, a mobile Gas/Diesel supplier, for fueling of equipment.
- For the fueling of equipment, General Petroleum will come to Statewide Metals' yard by appointment and on an as-needed basis.
- Refueling will occur every two to four (2-4) days; however the timing is dependent upon the amount of hours the equipment is in operation.

Containment Plans

Oil Containment:

-When any kind of oil spill occurs, a reliable absorbent will be placed over the spilled area. After the content(s) has dried, it will be shoveled up and placed into a plastic or metal drum. Until the content(s) is picked up from a professionally contracted waste-removal company, the content(s) will be stored in one of the two sheds located at Statewide Metals' yard.

Storm Water Containment:

- Statewide Metals has installed a new storm drain system. The storm drain system contains two types of net filters: the first set of net filters catch bigger pieces of debris, and the secondary set of net filters catch smaller pieces debris.
- The net filters will be cleaned once a week.
- A filter pump has been installed to regulate water flow.
- In order for storm water to flow into the drain, the property has been paved with a 1% slope.
*Refer to Plot Plans.

Purchasing Guidelines for Metals/Appliances

Customers:

- Fifteen (15) minutes prior to dropping off their product, all customers will be asked to notify the office via telephone.
- Statewide Metals will only buy product from a customer that has valid documentation/information (e.g. Drivers License).

-Statewide Metals has the right to refuse any customer and/or any load.

-Statewide Metals will buy both Ferrous and Non-Ferrous metals

-Statewide Metals will buy appliances.

-When the yard is at full capacity, a flagman will be sent outside the gate and will reject any load that is trying to enter the yard. Only after trucks depart and the flagman has given okay will trucks be accepted into the yard.

-Statewide Metals will advise their customers not to bring any product that contains any gasoline and/or diesel in it. Prior to the customers entering the yard, they will be held responsible for the discarding of the gasoline and/or diesel.

Gasoline/Diesel:

-Statewide Metals will refrain from purchasing any product that has a gas tank or that is gasoline/diesel powered. If product is bought containing any amount of gasoline/diesel in it, Statewide Metals will empty gasoline/diesel into a static-free plastic drum labeled "flammable" for both gasoline and diesel. The contents of the drum will be picked up and discarded by a professionally contracted waste-removal company.

Batteries:

- Statewide Metals will not purchase any batteries, as these are non-metal recyclable products. For Example: car batteries.

Mixed-Metals:

- Statewide Metals will purchase mixed-metals, Ferrous and Non-Ferrous, together and will buy/sell them as a "mixed load."

Appliances:

-Statewide Metals will be separating appliances from Ferrous and Non-Ferrous metals. When an appliance is dropped, a load inspector will dolly the appliance to the designated "Appliance Area."

-The appliances will stay in this location (Appliance Area), until pick up.

-For only the purpose of holding appliances, Statewide Metals has provided two (2) areas totaling 269.30 square feet. When appliances are dropped, they will be stacked in one of the two areas.

-Statewide Metals will not be dismantling appliances but will be selling each appliance unit that has been collected as a whole. Appliances will only be sold to authorized buyers and dismantlers.

Processing and Storing of Metals:

-Statewide Metals anticipates one to two (1-2) piles in the Dump Area.

- After product has been dropped, the John Deere 260 will scoop and push the product to the Excavator Processing Area. This is where the Cat-320 Excavator will make a pile. There will be appointed times for that same pile to be loaded, which will clear the area for the following day.

Unloading/Loading

Circulation of a Small Truck for Unloading:

1. Truck will enter from the East entrance off of Alameda Street. When traveling south on Alameda Street, the small truck will make a right-turn into the driveway. When customers are traveling north on Alameda Street, Statewide Metals will ask all customers to make a Left turn on to 92nd Street. After the customer has turned onto 92nd Street he or she will go around the block, which will force him/her to enter off of Alameda Street going south.

2. Truck will be flagged to the scale area by a traffic coordinator and weighed. After a valid Driver's License (and any other necessary information) is shown to the Weight Clerk, the driver will receive a Weight Slip, which will show the total weight. The total weight is a combination of the truck with the load.

3. Truck will be flagged to Drop-Off Area. Driver will give Weight Slip to a Load Inspector for a quick inspection and signature. Then, the customer will unload product.

4. After the product is unloaded, the driver will be flagged back to the Scale Area and re-weighed empty and given payment.

5. Truck will exit from the South exit on 92nd Street, where one is only able to make a right turn. In order to enforce this, there will be a sign posted indicating Right turn only.

-Estimated time from entering to exiting of facility/yard is approximately twelve to eighteen (12-18) minutes.

-Estimated maximum capacity is fifteen to twenty (15-20) trucks.

-Three (3) spaces in the SW area of the yard are specifically designated as a "Truck Waiting Area." Instead of the customers waiting on the scale to receive payment, a traffic coordinator will flag the customers to Truck Waiting Area, and the customer can walk to Weight Clerk window and receive payment. This will be a key component towards eliminating back up.

Circulation of overflow for Small Truck Loading:

*Refer to Plot Plans for Visual:

-As the trucks are unloading: the trucks in Waiting Area (1) closest to the scale will be flagged and will circulate around to the Clear Area and wait to be weighed. At the same time, the trucks in line will be flagged to the empty waiting area.

-When trucks in the Drop-Off Area are done unloading, the truck on the scale will then be flagged to the Drop-Off Area. The loaded trucks in the Clear Area will be sent to scale and then sent to Drop-Off Area.

-At this point, empty trucks will be in the Clear Area, and a new set of trucks will be unloading.

-Trucks in Waiting Area (2) will be flagged and will circulate around to the Clear Area. Simultaneously, empty trucks in Clear Area will be flagged to scale for a final weigh. Once the empty trucks are weighed and given payment, they will be flagged to exit. If it is necessary, the trucks will be flagged from scale to Check Waiting Area and wait for payment.

Closed Container Rear Loading:

- Loading hours will be by appointment only and held during the hours when product will not be received, mostly during late afternoon/early evening hours.

- Statewide Metals will ask all Closed-Container and End-Dump trucks picking up product to call the office twenty (20) minutes prior to their arrival

- All loading appointments must be scheduled 24hrs before desired pick up time.

- If management decides that it is necessary to load before the hours of 5pm-7pm, the protocol will be to set-up an appointment. This standard/method/protocol will be applied to both- "Closed-Container rear-loading" and "End Dump top-loading." During both "Closed Container rear loading" and "End Dump top loading," the entrance gate and exit gate will be closed. There will be absolutely no buying at this time. Only after all the loading is completed will buying once again resume. Closing both entrance gate and exit gate during appointment-only-loading will reduce traffic build up.

Refer to plot plans for visual:

- Both staging areas for Closed Container rear loading and End Dump top loading are mapped. Closed container semi-trucks will enter from the east entrance off of Alameda Street. The truck will be flagged to scale and weighed. Truck will be flagged to the Loading Area and will back-up to Loading Ramp and begin to load. The loading will be done from the rear of container by John Deere 260.

-After the truck has been loaded and cleared, it will be flagged back to the scale and weighed loaded. After the truck has been loaded and cleared, it will exit using the South exit on 92nd Street.

-The loading of Closed-Containers will be scheduled at a set time. All gates will be closed during loading, only opened for the entrance and exit of trucks that are loading. No buying will take place during loading.

-Estimated loading time is approximately, forty-five to sixty (45-60) minutes.

End Dump Top Loading:

- End Dump semi-trucks will enter from the East Entrance off of Alameda Street. The truck will be flagged to scale and weighed. Truck will be flagged to End Dump Top-Loading Area. End Dump Top-Loading Area will be located on the SE corner of the designated Dump Area. The End Dump truck will position itself parallel to the East wall of the designated Dump Area. The Cat-320 Excavator will grab the product from an already existing pile and load top side into the End Dump truck.

-After the End Dump truck has been loaded and cleared, it will be flagged back to the scale and weighed loaded. After truck has been loaded and cleared it will exit using the South exit on 92nd Street.

-The loading of the End Dump trucks will be scheduled for a set time.

-All gates will be closed during loading. The gates will only be opened for entrance and exit of trucks that are loading.

-No buying will take place during loading.

-Estimated loading time: 30-45 minutes

-Estimated Maximum capacity End Dump/Closed Container in yard is four (4).

-Estimated Maximum capacity End Dump/Closed Container loading in yard at once is two (2).

Svitek, Andrew

From: John Rodriguez [statewidemetals@yahoo.com]
Sent: Wednesday, March 24, 2010 4:50 PM
To: srich@dpw.lacounty.gov
Cc: Svitek, Andrew; sburger@dpw.lacounty.gov; ANARAG@dpw.lacounty.gov
Subject: Fw: 9113 s alameda st.
Attachments: Alameda - MODIFIED-PLOT PLAN-1-20-PLOT PLAN.pdf; Alameda - MODIFIED-PLOT PLAN-1-20-TRAVEL PICK UP.pdf; Alameda - MODIFIED-PLOT PLAN-1-20-TRAVEL PICK UP (2).pdf; Alameda - MODIFIED-PLOT PLAN-1-20-TRAVEL TRUCK (2).pdf

Sam here are the revised Plot plans with all necessary add ons.

Thank you, John A. Rodriguez

From: Chapman, Davey S. [mailto:dschapma@lasd.org]
Sent: Thursday, February 04, 2010 6:39 PM
To: Narag, Andy
Subject: RE: Alameda Corridor - Scrap Metal/Recycling Industry (Project at 92nd and Alameda)

Andy Narag,

I spoke to Sam this afternoon. He said you were looking for a quick reply to your email. So I will respond with what I have seen in the area of 92nd and Alameda.

1. On the concern of the backup along Alameda. It is not as prevalent as it once was just a year ago. The traffic has not been as heavy. The scrap metal business can be an indicator to our nation's economic climate. If the economy is rolling we generate a lot of waste. Then the recycling business is very busy. I was able to see how great a backup was created just before the Chinese Olympics'.
2. There were vehicles lined up at every recycler. There was a wait for every scale. On the smaller yards the backup would go north and south along Alameda Ave. This occurred while their customers waited to enter the location.
3. I went along Alameda this morning and late afternoon. There was no back up other than a large container trucks entering a yard. Most of the larger yards can handle the current traffic. The one small yard I showed you on your visit had a newer Toyota truck parked on the side walk in front of the location.
4. During the boom times some yards had flag men that would hold up customers on vacant streets until room was open.
5. I agree that the applicant must provide accommodations. That the site must be able to handle the traffic issues and not relinquish parking space to handle product demand.
6. The issue of customer vehicles. The most common is the small and full size pickup trucks. There are also small cars and vans. It depends on what type of recyclable material the location brings in. For steel trucks are common. For multipurpose locations with paper and CRV added smaller vehicles are common also.
7. Small yards I would say 80 to 90 percent of the vehicle are trucks.
8. Larger yards have 20 percent large commercial traffic into the yards to accommodate shipping and receiving. The smaller yards usually have larger commercial traffic that varies on volume of material received and shipped out of the location.
9. To estimate what the volume of business the location on 92nd and Alameda would generate I would have to take into consideration what client base they cater towards. I believe that they will carter to the steel customer. This produces a bigger volume due to the size of the material. This would slow down the unloading and loading of the material. The turnaround time for vehicles entering and leaving the location depends on how efficiently they process the material. Each vehicle needs to weigh the full load. Unload the material. Re weigh the vehicle to determine the weight of the material. Then fill out the proper paper work to get paid by the location.
10. During slow times the location could receive 1 to 10 vehicles per hour. I watched a small yard today process 4 vehicle in 20 minutes.
11. Weighing all the above, I think that if I had to guess in today's climate, I would say between 20 and 30 vehicles. If depends on how they conduct their business.

Department of Regional Planning
320 West Temple Street
Los Angeles, California, 90012
Andrew Svitek

February 10, 2010

Sent via email: ASvitek@planning.lacounty.gov

Re: RCUP 200800163 / Project #R2008-01962

I object to the CUP application RCUP 200800163. The applicant's proposed use will again create traffic problems for our adjacent business. During the period the landowner/applicant last operated without permit created traffic problems that adversely affected our business. The site is too small for the proposed use. Size matters, the average steel-recycling yard is 3.7 acres and the smallest yard is twice the size of the applicant's site (see Exhibit 1).

There are also environmental concerns that need to be addressed. The applicant/landowner's counsel testified at the December 9 hearing there were no environmental issues and provided the Planning Department a Phase I environmental report. Their counsel also testified that discolored soil was removed from the site and D. Robert Schwartz had not operated a steel recycling yard at the 92nd St. site. Included in this writing, as Exhibit 2 is a portion of the Phase I report, which states that there was discolored soil at the 92nd St. site and the site had been used as a parking lot from 1995 until the current date.

Scrap steel facilities operating on dirt create the potential for soils contamination. The Phase I report suggested testing and removal of the obvious discolored soil. Apparently, the soil was removed, without providing Public Works with manifests or test results. The applicant/owner or tenant completed concreting before approval by Public Works (see Exhibit 5).

The applicant/landowner's son, D. Robert Schwartz did operate the 92nd St. facility as a steel-recycling site. Exhibit 3 are pictures of the site in 1996 depicting the operation of a scrap steel recycling facility. Exhibit 4 is a document from OSHA (Occupational Health and Safety Administration), which is a violation in 1998 describing D. Robert Schwartz as the owner operator of Alameda Metals. The Schwartz family also operated another scrap yard at 10907 South Alameda using

the same name, Alameda Metals. The 10907 South Alameda location has operated without CUP for more than ten years and still operates today unabated or regulated by the Planning Department or any other county agency.

Testimony is not consistent with the facts. There was visual confirmation of contamination (Phase I report). Soils were or were not removed, however the site was concreted, apparently without testing. In the interest of public health and safety I request this site be referred to the appropriate agency for assessment.

This site is .7 acres and will create traffic problems for both Alameda St. and the adjacent area from the 92nd St. exit. Traffic will increase and the neighborhood to the west will be burdened by traffic exiting from the site. The site's gross area has been reduced by the exclusion of south/east lot, which further reduces the usable area. The requested operating hours of 7:00am to 7:00pm seven days a week and after hours loading are inconsistent with any existing legal steel scrap operation. The typical operation is Monday through Friday 7:00am to 4:30pm and 7:00am to 12:00pm Saturday without after hours operations.

An operation of this size, without the right turns limitation, would normally be a CRV or Non-Ferrous operation. Steel yards require larger material handling equipment and more room for staging and preparation.

The community and local businesses testified in opposition to this project. Los Angeles County Sheriffs Department also expressed their concern regarding potential traffic problems. Recycling operations have become increasingly complex over the years; there are many problems with scrap operations creating greater burdens on the public sector. Standards need to be set for all applicants and operators of recycling operations to be compliant. Laws already exist; land use needs to conform to these existing laws and match recycling sites with an appropriate use for the size, applicant backgrounds and suitability of the site.

Sincerely,

Greg Williams, CCIM MBA
323 564-9969

Exhibit 1

<u>Steel Recycling Yards</u>	<u>City</u>	<u>ZIP</u>	<u>Acres</u>
Williams Recycling	Los Angeles	CA, 90002	1.50
Big D	Gardena	CA, 90248	1.80
Lancaster Recycling II	Lancaster	CA, 93535	1.90
Oxnard Metals	Oxnard	CA, 93030	1.90
Santa Ana	Santa Ana	CA, 92703	1.90
Mid City Iron & Metal	Los Angeles	CA, 90021	2.20
Fairway Salvage	South Gate	CA, 90280	2.60
Valley Iron & Metal (Sun Valley)	Sun Valley	CA, 91352	3.50
A-1 Metals Recycling (Sun Valley)	Sun Valley	CA, 91352	3.60
Colton Iron & Metal	Colton	CA, 92324	3.60
Irwindale Iron & Metal	Irwindale	CA, 91706	3.60
Weiner Steel Division	Montebello	CA, 90640	3.60
Macoy	Paso Robles	CA, 93446	3.90
Alameda Street Metals	Los Angeles	CA, 90002	4.00
Atlas Iron & Metal	Los Angeles	CA	4.00
Lancaster	Lancaster	CA, 93535	4.00
Kornoff Metals Recycling	Pomona	CA, 91766	4.40
B&D	El Monte	CA, 91732	4.50
Coachella Valley Recycling	Coachella	CA, 92236	4.80
Etiwanda	Rancho Cucamonga	CA, 91739	5.00
A-1 Recycling (Hesperia)	Hesperia	CA, 92345	5.20
Carson Auto	Carson	CA, 90810	5.60
A to Z Auto	San Diego	CA, 92113	6.00
Downtown Metal Center	Los Angeles	CA, 90058	6.10
Applicant 92nd St			0.75
Applicant 89th St.			0.89
Range - Size of Steel Yards (acres):	1.5 - 6.10		
	Mean		3.72
	SD		1.37
	Median		3.75
Range - One Standard Deviation:	High		5.08
68% Of Yards	Low		2.35

Exhibit 2

EXECUTIVE SUMMARY

Site Location and Description:

The property is located at 9101-9111 S. Alameda St. in Los Angeles County. It was first developed as Barrels Wrecking Yard in 1934. The ownership changed hands and it became a tire salvage yard in 1946. In 1952, it was purchased by Fred Schwartz and operated as a general salvage yard until 1995. Since then it has been used for vehicle parking.

The elevation is 117 feet. It is underlain by 200-400 feet of Holocene and late Pleistocene age alluvium. The depth to ground water is approximately 140 feet and it has a regional flow direction to the west. The property is 3 miles east of the active Newport-Inglewood Fault Zone, but not in a Special Studies Zone. The property is located in a Seismic Hazard area. The historic depth to ground water is 50 feet, placing the property at a moderate potential for liquefaction in the event of a 6 or greater magnitude regional earthquake. The property is not in a wetlands or a 100 or 500 year flood. No oil or gas wells have been drilled on the property.

Site Land-Use History:

1923 to 1934's hay barn and farm; 1934's to 1946, wrecking yard; 1946 to 1952, tire salvage; 1952 to 1994, tire and general salvage; 1995-present, vehicle parking.

Site Reconnaissance:

Hazardous materials were stored, utilized, and generated on the property in the past, and will be in the future. They primarily generated waste oil associated with the dismantling of equipment, machines, and vehicles. There are leaking oil drums on the property and oil stained patches of soil. We determined the oil storage area and associated spills are located above a former shed, that was demolished in 1975.

The planned future use is for as of yet unnamed company to operate a salvage yard. The property will be paved over in concrete. This will minimize the future threat from oil spills from the salvage operation.

Regulatory Agency Listings and Adjacent Land Use/Area Reconnaissance:

The property is listed as generating waste oil in the past, and has a open storm water permit with Los Angeles County, Environmental Health Division. It is not listed as a hazardous site.

There are 11 sites within the ASTM distances of the property known to have caused environmental impact. One site is located up-gradient, and under investigation. The responsible party has been identified and it is currently undergoing clean-up under agency oversight. There are no off-site threats to the property.

To the north is a high tension power line. To the south are 3 small companies involved in auto parts and auto glass. To the east is the Alameda Corridor, a subsurface train right-of-way. To the west is a salvage yard. This property is listed as an active site that needs additional investigation for a leaking tank. To the southwest is a muffler and radiator shop.

The office building was constructed in 1946 (photos 9-14). It was originally the 10 X 25 foot second room of the current office (photo 14). It was expanded to the current size in the 1950's and remodeled in 1969.

In 1952, the property was purchased by Fred and Morris Schwartz. They operated the tire salvage and added general salvage. Apparently they were recycling any commodity that was being purchased for reuse. A storage shed that was formerly located in the west end of the property was demolished in 1975 (building permits). They operated as Alameda Metal Recycling until 1995. Since then it has been operated on a part time basis by Robert Schwartz and used for the storage of operating and non-operating vehicles (photos 5-8).

The ownership and land use of the property has been summarized from available sources as:

1934-1946.	J.A. Bartels/wrecking yard (historic photos);
1946-1952.	Jess Kaplan/tire storage yard;
1952-1993.	Fred Schwartz/tire and general salvage yard;
1993-present,	Schwartz Family/vehicle parking (photos 1-10).

Previous Assessment Work:

No previous environmental assessment work has been done on the property.

Site Reconnaissance:

Hazardous materials have been identified to have been stored, utilized, and generated on the property in the past, and will be in the future.

A structure was found to have been located on the corner of E. 92 St. and S. Alameda since 1899, and it was a hay barn in the 1920's. This structure possibly had a septic system. We do not have evidence indicating any misuse of the septic system, and it may contain human waste if it was not already found. In any event, any residual waste from the septic tank is long broken down to harmless compounds, since it's last use was 70+ years ago.

It was a wrecking yard from the mid 1930's until possibly the mid 1940's when it was converted to a tire salvage yard. In the 1950's to the 1990's it was a general salvage yard, primarily metals. Since the 1990's the property has been used for vehicle storage and salvage (photos 5-8). Waste

oil was observed to be stored in 55 gallon steel drums on the west side of the property (photo 15). One of the drums has leaked oil onto the surface (photo 16). Mrs. Jean Schwartz has begun the proper off-site disposal of the waste oil and the excavation of any impacted soils from the property. Preliminary excavation reports they encountered the old concrete foundation from the storage shed that was demolished in 1975 (Sanborn maps & building permits). The approximate location of the former shed is plotted on map 2.

This is very positive in the fact that the old concrete foundation has likely stopped any oil that had leaked onto the surface from penetrating more than a few feet into the overlying soils. A few older, accidental/incidental, spills were observed and will be excavated for off-site disposal (photo 17). A follow-up will be conducted when this work is completed.

Oil breaks down to the harmless compounds of carbon dioxide and water over time. The amount of time required is related to the amount of oil released and the concentration of naturally occurring bacteria that consume hydrocarbons. There may be some older small releases from the past that have broken down or in the process of breaking down. This clean-up will address any obvious recent releases.

The planned future use of the property is for it to be leased for use as a salvage yard. The surface will be paved over in concrete. The new company has not yet been named. Any future threat to the property will be the same as what is currently being cleaned-up right now. Small incidental spills and leaks from equipment. The concrete will stop any serious penetration into the sub-surface soils.

Surface water drains off the property as sheet flow east onto S. Alameda and south onto E. 92nd St. Much of the rainfall currently soaks into the ground. Storm water runoff will become an issue for the new salvage yard, and should be addressed at the time the new pavement is installed. The runoff flows west on the surface of E. 92nd St. and enters the Glen Ave Drainage System at the intersection with Juniper. It flows roughly south where it discharges into the Compton Creek in Compton. The Compton Creek flows southeast and discharges into the Los Angeles River. The Los Angeles River flows south and discharges into San Pedro Bay near Long Beach, where it eventually mixes with the waters of the Pacific Ocean.

There is no off-site threat to the property from the neighboring or adjacent occupancies or operations.

Environmental Compliance Program:

There is no current environmental compliance program in place for the planned future use as a scrap metal recycling yard.

In the event the office is retrofitted with fluorescent lighting, Current California law requires a recycling program be instituted for used fluorescent light tubes. New fluorescent tubes come in boxes. A designated maintenance person should be used to change all tubes. The used tube may be stored in the original box. When the box is full of used tubes, a recycler may be called for a pick-up. This receipt should be kept for evidence of compliance.

CONCLUSIONS AND RECOMMENDATIONS

Our review of public records, occupancy and land use history, and inspection of the property has found evidence of minor environmental impact that requires an internal clean-up.

The waste oil in the drums needs to be picked up by a recycler and disposed of properly. All oil stained soils needs to be excavated, sampled, and disposed of properly off-site.

Since the last office remodeling date was 1969, the spray applied ceiling was sampled for asbestos content. The result was negative indicating asbestos is not present in this material. PCB's are not suspect of being present. The potential for infiltration with Radon Gas is minimal. No mold cultures were observed.

Since the building was constructed in 1946, it is possible some of the older underlying paint contains lead. No chipped or peeling paint was observed, and this hazard generally applies to small children. Since small children will not be in or around this facility, this is not an issue at this time.

The property is underlain by 200 to 400 feet of Holocene and late Pleistocene age alluvium. The depth to ground water is 140 feet with a flow direction to the west. The property is located 3 miles east of the active Newport-Inglewood fault, but is not in an Alquist-Priolo Special Studies Zone.

The property is located in a Seismic Hazard Zone and subject to moderate levels of liquefaction in the event of a 6 or greater magnitude earthquake.

The property is not a 100 or 500 year flood zone. The property is not in a wetlands area. The property has not been the subject of willful industrial abuse, mining, legal or illegal land filling, or oil and gas exploration.

Hazardous materials have been stored, utilized, and generated in the past, and will be in the future. Since the property is to be paved over in concrete, the potential for future environmental impact from the planned use as a scrap metal yard is minimized. This type of land use may generate oil and other hazardous substances.

There are 11 sites within current ASTM distances that are recognized to have caused environmental degradation. One site is located up-gradient, and has impacted the soil only. It is currently in the clean-up stages and poses no threat to the subject property. The remaining sites are down or off gradient from the subject property and pose no threat.

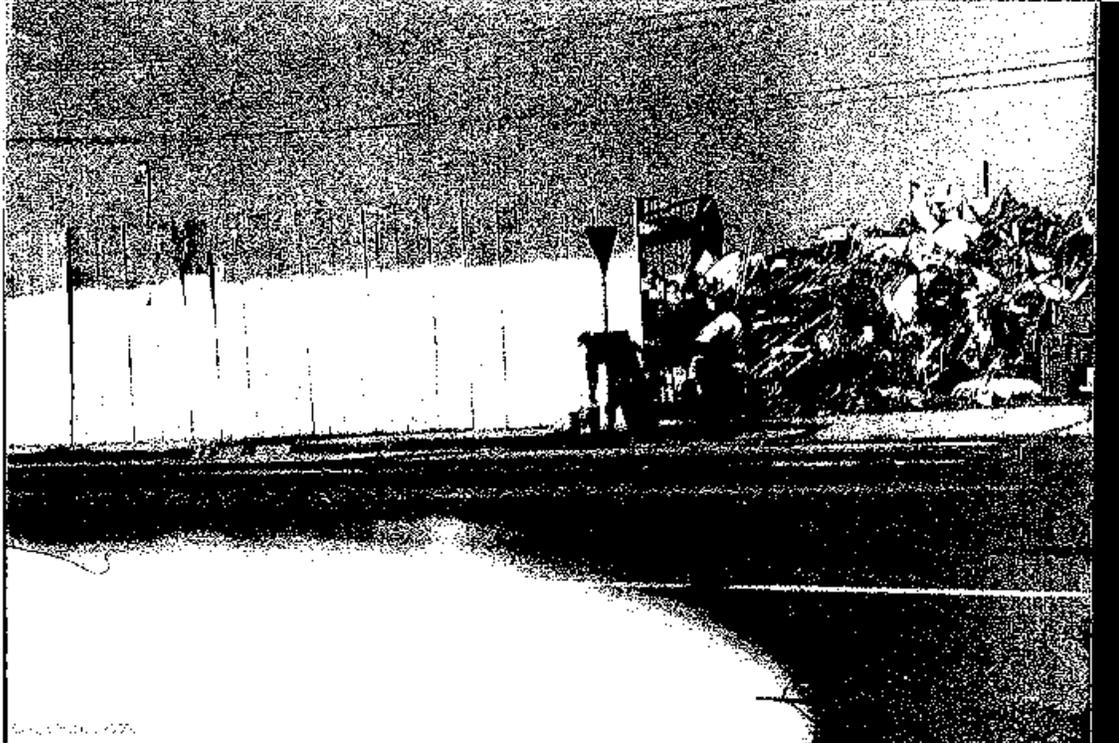
The adjacent property to the west will have to do additional investigation related to a leaking underground storage tank. The neighboring property to the south is listed as a small quantity generator of hazardous waste. These listings pose no threat to the subject property. None of the other neighboring or adjacent property are listed on government documents.

We recommend the waste oil and oil saturated soils be clean-up prior to the new occupants starting operations. We also recommend the future occupants obtain the necessary hazardous and storm water drainage permits to operate.

LIMITATIONS

This report has been prepared to impart information of the obvious environmental condition and hazardous waste liability of the subject property. The statements in this report are based upon observations of the apparent conditions of the premises, systematic investigation of public information, and the interviews with the primary parties, as stated in the Scope of Services. No

Exhibit 3



Rear Gate

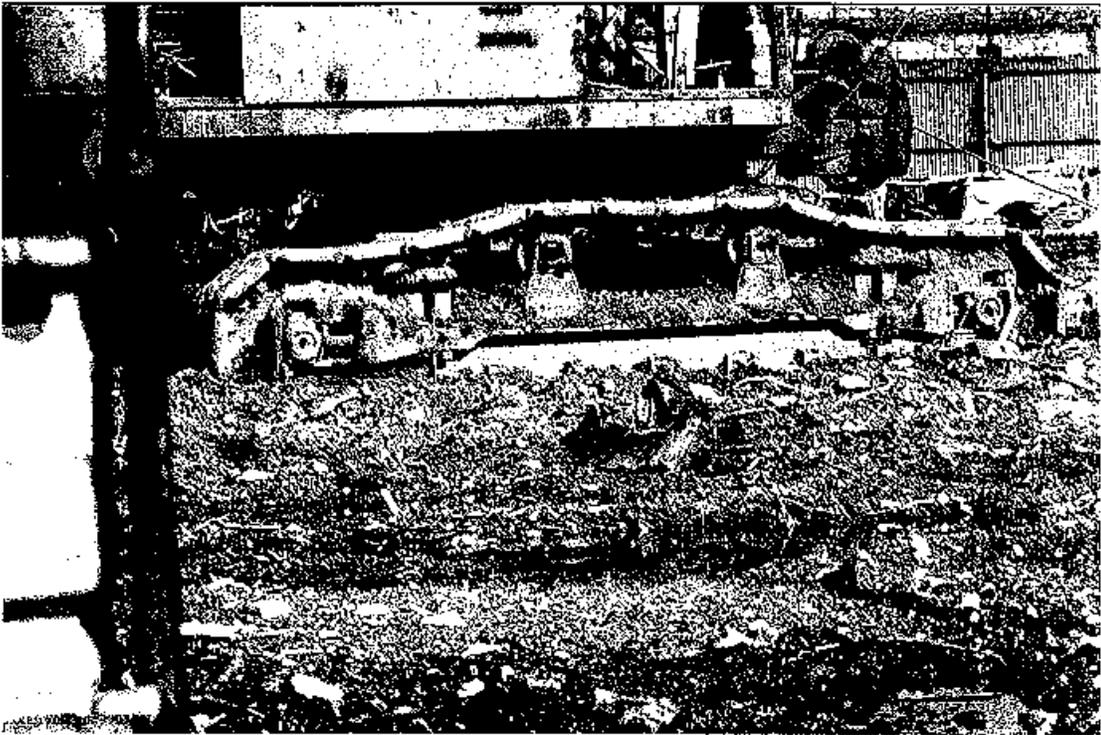


Exhibit 4

**BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH APPEALS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA**

In the Matter of the Appeal of:

D. ROBERT SCHWARTZ dba ALAMEDA METAL RECYCLING and
ALAMEDA STREET METALS

9101 South Alameda Street

LOS ANGELES, CA 90002-1845

Employer

Docket No.

96-R4D2-3553

**DECISION AFTER
RECONSIDERATION**

Before the Appeals Board is a decision dated September 11, 1998, by an administrative law judge (ALJ) of the Board, finding violations of the occupational safety and health standards and orders found in Title 8, California Code of Regulations. On October 14, 1998, D. Robert Schwartz dba Alameda Metal Recycling and Alameda Street Metals (Employer) filed a petition for reconsideration. The Division of Occupational Safety and Health (the Division) did not file an answer. The Board granted Employer's petition for reconsideration on December 2, 1998.

BACKGROUND

Employer used a crawler crane to move scrap metal at its salvage yard. Two years before the inspection, Employer had repaired the crane's 40 foot lattice boom. The repairs included severing the boom into separate sections and four days of welding work, during which a four foot section of the boom was replaced using heavier steel with less tensile strength than specified by the crane's manufacturer. The boom was not inspected by a certified inspector before being put into service. Several employees operated the crane during the period

preceding the inspection.

FINDINGS AND REASONS FOR DECISION AFTER RECONSIDERATION

Section 5035(b)2 provides that “[a]ny new or extensively repaired boom . . . shall be tested before use. . . . When tests are necessary, they shall be performed in accordance with section 5022.” Section 5022(a)(3) requires that proof load tests of cranes shall be carried out “[i]n the case of major modifications or repairs to important structural components, before they are returned to service.”

Employer contends that the boom was not “extensively repaired” because only four feet of the boom’s forty-foot total length was replaced and repaired. Employer argues that the four foot section is too short to be considered “extensive.” Employer argues that because the safety orders do not provide a definition of “extensive” applicable to section 5035(b), “extensive” must be taken to refer to the number of linear feet of boom replaced, and that replacement of a four foot section of a forty foot boom is not extensive.

Where no definition of a term is supplied by the safety orders, the Appeals Board has applied the meaning attributed to the term in common usage or common law, in the absence of evidence of a contrary meaning.³ Black’s Law Dictionary defines “extensive” as “[w]idely extended in space, time, or scope; great or wide or capable of being extended.”⁴ The term “extensive” does not, therefore refer only to the number of linear feet of the boom repaired, but to the importance of the repairs undertaken.

The evidence supports the ALJ’s finding that the repairs were important in terms of renewed use of the boom. The boom had failed prior to the repair. It was severed into separate sections to be repaired. The welding work involved in the repair took four days to complete. The tensile strength of the steel added to the boom lattice during the repair was less than used by the manufacturer, and it was of a different weight. In these circumstances, the Board finds the repairs were extensive, and that inspection was required by section 5035(b) before the crane was put back into service.

The Appeals Board has considered the decision of the ALJ and the record in light of Employer’s petition for reconsideration⁵ and affirms the ALJ’s summary of evidence, rulings, findings,⁶ and conclusions and adopts the decision in its entirety. Accordingly, the ALJ’s decision is attached and incorporated⁷ by reference.

DECISION AFTER RECONSIDERATION

The decision of the ALJ dated September 11, 1998, is reinstated and affirmed.

BILL DUPLISSEA, Member MARCY V. SAUNDERS, Member

OCCUPATIONAL SAFETY AND HEALTH APPEALS BOARD SIGNED AND
DATED AT SACRAMENTO, CALIFORNIA - March 15, 2001

1 Unless otherwise specified, all section reference

Exhibit 5

Eckert, Lisa
From: Eckert, Lisa
Sent: Monday, March 02, 2009 5:03 PM
To: Tan, Wu
Subject: RE: 9113 Alameda Ave - Old Scrap Metal Yard

Thank you Wu. Yes, we just have to make sure they address any contaminated soils.

Lisa Eckert, PE
Drainage & Grading Section
L. A. County Building & Safety
Southwest Office Tuesdays 7:30-11:30am 323-820-6500
Lomita Office Wednesdays 8-12noon
East Los Angeles Office Thursdays 8-12noon

From: Tan, Wu
Sent: Monday, March 02, 2009 4:59 PM
To: Eckert, Lisa
Subject: RE: 9113 Alameda Ave - Old Scrap Metal Yard

Hi Lisa,

We do not have the County ordinance for this type of condition (Brownfield) yet. This is something that we have been trying to establish/develop the ordinance and it has been in the back burner. Typically in this situation (like former gas station) we would rely on Building & Safety requirement (safety issue/s...?) before we can act on it. In other words, B&S will be the enforcer/permit requirements and our Division will be the supporting back-up for B&S.

PS: You may want to look at the soil report to see the extent of the contamination.

Thanks

From: Eckert, Lisa
Sent: Monday, March 02, 2009 2:29 PM
To: Tan, Wu
Subject: 9113 Alameda Ave - Old Scrap Metal Yard

Hi Wu,

I was wondering if you have any requirements for testing for an old scrap metal yard. This particular site is in the processes of obtaining an updated CUP for the site. It will remain a scrap metal under new ownership.

The applicant has complained about the amount of time it takes to get approval from Regional Planning and has actually poured the concrete for the site. Our planner here is concerned that they may get away with not treating the site for contaminated soils since they are covering it up right now. We want to make sure they don't.

Thank you,

Lisa Eckert, PE
Drainage & Grading Section
L. A. County Building & Safety
Southwest Office Tuesdays 7:30-11:30am 323-820-6500
Lomita Office Wednesdays 8-12noon
East Los Angeles Office Thursdays 8-12noon

Svitek, Andrew

From: GWJOSEPH@aol.com
Sent: Thursday, April 01, 2010 9:43 AM
To: Svitek, Andrew
Cc: natalie@williamssoftware.com
Subject: RE: 9113 S. Alameda Street

The Department of Regional Planning
320 West Temple Street
Los Angeles Ca 90012

4/1/2010

RE. 9113 S. Alameda St. Project #R2008-01962-2

I am writing in regards to the responses that were provided for the questions from public works. There still has not been an actual operational plan submitted detailing how this applicant plans to operate. The plot plan still shows only 4 parking spots and one handicap spot. According to the testimony given at the last hearing and the answers provided to public works, there will be at least 6 employees, including a flag man, inside grader, scale operator, excavator operator, Deere machine operator and the manager John Rodriguez. The plot plan does not show ample parking to provide for these employees. They have not addressed the correct loading times for containers. As I testified at the last hearing, it is not possible to load a container in 20 minutes. Experienced loaders combined with short material usually vary between 1.5-2 hours. It is important to note that it is not realistic to accept end dumps and containers by appointment only. Additionally after hours loading is something that no other scrap yard is allowed. The responses also indicated that there will be end dump loading as well. This is a completely different process from loading containers. How do they plan on maneuvering the end dump in the yard? It seems that the only place to move it is in the drive area. Lastly, there must be an available ADA compliant restroom on the premises, which is not reflected on the plot plan.

Regards
Gary Weisenberg
Atlas Iron and Metal Co.

LAW OFFICES OF

Robert David Ciaccio

also Admitted in New York

CITY NATIONAL BANK BUILDING
3424 CARSON STREET, SUITE 500
TORRANCE, CALIFORNIA 90503-5701
(310) 214-1477 Ext: 109
FAX (310) 214-0764

Email: rdc@robertdciacciolaw.com

February 12, 2010

Our File No. 10005.01

VIA EMAIL asvitek@planning.lacounty.gov
and US MAIL

Regional Planning Department
Attn: Andrew Svitek
320 W. Temple
Los Angeles, CA 90012

Re: Project #R2008-01962-2
CUP# 200800163

Dear Mr. Svitek:

During the February 10, 2010 hearing, issues were raised by you, the Panel and Department of Public Works ("DPW") regarding the proposed use and operations to take place at the site. Planning has requested and posed to the applicant substantial questions regarding the operations, logistics and necessities of running a scrap yard. More specifically, a detailed operations plan was requested which includes identification of necessary equipment, storing and staging locations. Counsel for the applicant proposed as a solution to the increased traffic and lot size, that the services of a flagman should be utilized and made a condition to the CUP, as well as, after hours operations. Such a proposal is nonsensical and unworkable given the complaints previously made by residents for traffic and noise during business hours, let alone at night and the inability of flagmen to ascertain what makes up the load.

Also, you may recall that the applicant does not possess numerous hazardous materials license(s) per his counsel. Applicant seeks to make such a license a condition to the CUP. The problem is that by permitting an operation to occur without the license would foster the following problems: 1) a customer with a scrap load of refrigeration, auto engines or other hazardous materials could not simply be waved-on to a neighboring yard without first unloading the scrap metal to determine if it contains special handling requirements. The load would then have to be reloaded for transport to another location causing traffic delay; 2) the notion that the flagmen will be able to identify the substance of a load by discussion with the driver is impractical and would require both the flagmen and driver to have substantial knowledge of both the hazards and contents of the load.; and 3) other yards would not necessarily be able to handle the increased traffic (as directed by the flagmen) and the expansion of the business in better times would further create traffic congestion.

Further, at the February 10, 2010 hearing during the public comment portion, I called to the attention of your offices and the hearing panel my November 12, 2009, correspondence date stamped November 16, 2009, identifying issues which I believe should be addressed prior to consideration of the application for the issuance of any CUP. It appears that for some reason the environmental soils issues have taken a

backseat to the traffic, site size and operations, but in my opinion are as important, if not more important, in a determination of whether or not the CUP should issue, as well as, a negative declaration. A review of this letter indicates that email correspondence existed between Lisa Eckert, Los Angeles County Building and Safety inspector and Mr. Tan, dated March 2, 2009, regarding the pouring of concrete and the need for soils testing to determine contamination (see attached email). This issue has been ignored to date.

Discussion was had with DPW regarding the potential existence of hazardous substances on the property. DPW indicated that they had referred to the Fire Department Hazardous Materials Unit the questions as to hazardous materials within the soils and has received no updates regarding hazardous materials. I have yet to receive any answer to the questions posed in Ms. Eckert's email regarding testing for hazardous waste on the premises and her concern for contamination.

On page 34 on the initial study/report make referenced to hazardous materials, tanks, soil toxicity and emissions possibly being present on the site. No study was requested to determine the scope of any hazardous substances currently existing on the site other than an unsupported opinion that less than significant impact would occur. Please review the initial study/report.

Further, page 6 of the study indicates "the site is located within a potential liquefiable area per the State of California Seismic Hazard Zones Map - Southgate Quadrangle. The project could be significantly impacted by this geotechnical hazard, ..." A conclusion was then reached that the risk could be reduced with proper mitigation. The applicants shall be required to submit a soils report to determine the appropriateness of the liquefaction for the proposed site. It should be noted that the area was paved prior to the application for the CUP and no soils report has been submitted to determine the appropriateness of the liquefaction for the proposed site.

Lastly, I call your attention to the conclusion reached in a report submitted by the applicant that waste oil and saturated soils be cleaned prior to the new applicants starting operations (Phase I). "We recommend that future and oil saturated soils be cleaned up prior to the new occupants starting operations. We also recommend that future occupants obtain the necessary hazardous and storm water drainage permits to operate." The report also is limited solely to visual observation and prior history. This report was purportedly submitted by the applicant and commissioned by the owner several years ago. Where is the Phase II and shipping manifests?

The matter before the panel seeks not only a CUP but a negative declaration. The aforementioned issues must be addressed. Contrary to the rebuttal of applicants counsel, there has been wide spread objection to this project by both other scrap yards and residents who have previously appeared at hearings. It is clear that this location is inappropriate both in size and composition. The next scheduled hearing is April 14, 2010. Please advise.

Very truly yours,

LAW OFFICES OF ROBERT DAVID CIACCIO



Robert David Ciaccio

RDC/djn

cc: Andy H. Narag, PE
Jon Sanabria, Phd

Eckert, Lisa
From: Eckert, Lisa
Sent: Monday, March 02, 2009 5:03 PM
To: Tan, Wu
Subject: RE: 9113 Alameda Ave - Old Scrap Metal Yard

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Lisa Eckert, PE
Drainage & Grading Section
L. A. County Building & Safety
Southwest Office Tuesdays 7:30-11:30am 323-820-6500
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Thank you,

Lisa Eckert, PE

Drainage & Grading Section

L. A. County Building & Safety

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Lomita Office Wednesdays 8-12noon

East Los Angeles Office Thursdays 8-12noon

Svitek, Andrew

From: mona [mona@williamssoftware.com]
Sent: Monday, March 22, 2010 4:05 PM
To: Svitek, Andrew; srich@dpw.lacounty.gov; anarag@dpw.lacounty.gov; Sanabria, Jon
Subject: Project CUP r2008-01962 9113 S Alameda Street
Attachments: finalnarrative.pdf

Dear Andrew:

Included is a demonstration of scrap handling within a 3100 square foot area that shows in the applicant's plot plan (drop area).

The demonstration illustrates that size is inadequate for proposed use. The outcome will overflow the yard and create traffic issues on Alameda Street.

We would be happy to demonstrate the process again if needed to your team.

Thanks you and please include in the commissioners package. Please call if you have any questions.

Regards,
Mona Howerton 714.269.2519
Williams Recycling

Robin Robinson (714) 412-7526
SA Recycling

First customer 7 AM

Area filled by 8:45 AM

7.5 tons with cars to fill buying area

15 customers

The applicant is proposing to allow for a 3,069 square foot area for buying steel (See applicants plot plan exhibit 1). This area is exclusive of the traffic queuing area. Customers must be able to pull their trucks all of the way into this area as the traffic flow runs right along the drop area (See exhibit 2). To represent this, we set up their drop pile according to the plot plan submitted (See exhibit 3). In addition to room for the customers, there must also be a designated area for accepting/ handling appliances per the C.A.R. regulations (See exhibit 4). For the purpose of this exercise, a 20 ft. by 46 ft area was marked off for appliances only. The drop area needs to include room to receive incoming material, sorting, processing, and storage.

Local customers bring in on average a ½ ton or 1000 pounds per load (See exhibit 5). These loads are typically mixed and may include tin, long iron, short iron and major appliances (See exhibit 6). The applicant's attorney stated that they would not be purchasing appliances and would simply flag away potential customers that had them. A scrap yard does not turn away any recyclable iron. The applicant would need an extra employee to "flag away customers" and another employee to inspect the loads, making sure that there are no appliances. This process would extend the line onto Alameda St., as well as require additional employees and parking. While open briefly, the applicant did in fact purchase appliances (See exhibit 7). 53% of the customers received during this exercise had appliances (see exhibit 8). It is not realistic to turn away potential customers because they have appliances.

To receive and prepare for recycling major appliances, a scrap metal recycler must obtain a Certified Appliance Recycling permit from the Department of Toxic Substance Control. To obtain the permit, the scrap metal recycler must detail their procedure on the materials that require special handling and have it approved.

Major Appliances include the following items;

- Refrigerators
- Freezers
- Washing Machines
- Gas Stoves
- Gas Residential Heaters
- Microwaves
- Commercial Hot Water Heaters
- Trash compactors
- Dehumidifiers

Components that need to be removed from these major appliances before they are crushed /bailed/dismantled/or shredded include the following:

- Transmission Oil
- Mercury Switches
- Compactors containing oil
- PCB Compactors containing PCB oils
- Mercury Switches
- Freon
- Compressor oil

All of these recovered items must be managed in a way that does not impact the environment, cause health risks to individuals, and is managed and disposed in a legal and safe way. In addition to having a designated place within the drop area for appliances, an additional area is required to properly dismantle these materials.

The time it took to fill up the drop pile area was 2 hours with a total of 15 customers and 7.5 tons (See exhibit 9). Based on a conversation with the planner, the applicant is forecasting 60 tons, which would be approximately 120 customer trucks a day in purchasing. Unprocessed material permits 10 tons per container. This means that a minimum of 6 containers must be loaded on a daily basis, after hours loading would not be possible as they would run out of room after the first 2 hours of buying. Unprocessed material also takes longer to load, as there are larger and irregular pieces of material.

As Gary Weisenberg from Atlas Metals testified at the last hearing, it is not possible to load a container in 20 minutes as the applicant was proposing. Even the most efficient loaders combined with the heaviest processed material take an hour to load, and more realistically, it takes about 2 hours. In order to be able to keep up with the material and maintain a safe working environment, the applicant must spend 6-12 hours a day loading containers.

The small size of the yard and the restricted drop off area causes many traffic problems. The size of the yard only allows for one scale, so customers must weigh in and out on the same scale forcing new customers to wait. The very short cueing area means that the next customer in line must wait on Alameda Street so that the outgoing customer has adequate room to get back on the scale.

The size of the drop off area only allows for 3-4 customers to be unloading material at one time. Because of this, customers are forced to wait longer to unload material. They end up waiting in the street because the yard does not have the space to sufficiently queue traffic off the street.

Lot size is directly related to traffic issues. The proposed steel scrap yard use has heavy traffic, while other uses such as non-ferrous would work well for a lot this size. The receiving, sorting, processing storing and shipping requires large equipment and sufficient room for support items such as a fuel area, truck movement etc. (see exhibit 10)

The size of the land is a constraint for the proposed use. This area is just too small for steel recycling, it is not possible to safely and legally operate a steel recycling facility of this size.

Regards,

SA Recycling
Alameda Street Metals/SA
Williams Recycling
Atlas Iron and Metal

Exhibit 1

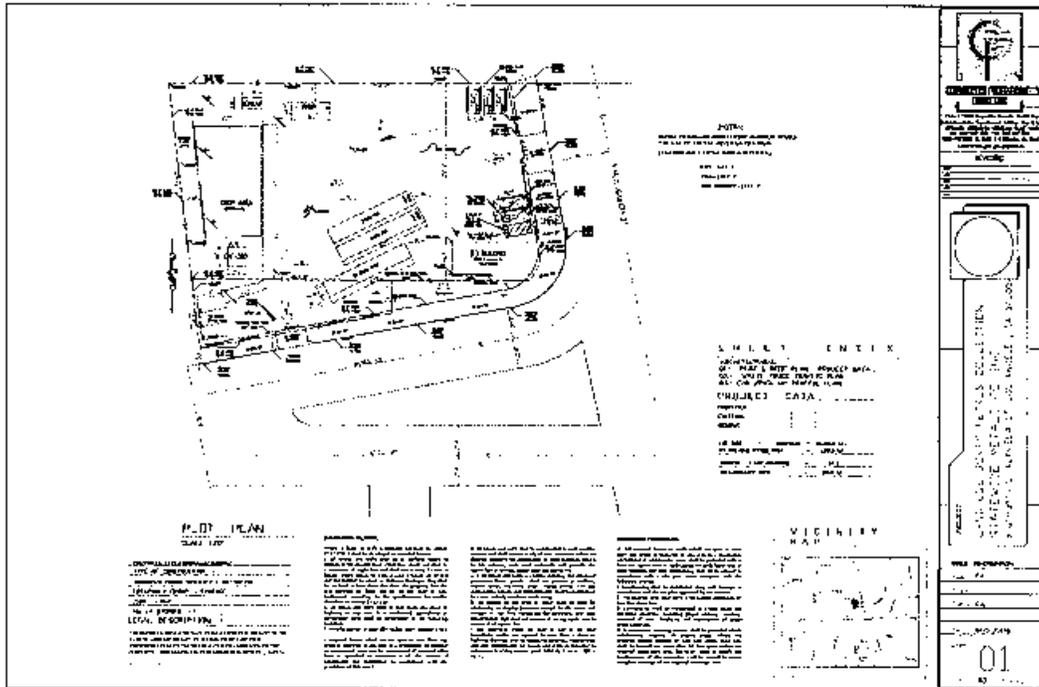


Exhibit 2

DS2 2 Across Back Yard Mar 11, 2010 6:29:51 AM PST

The traffic flow runs right along the drop area. Customers must be able to back all of the Way into the drop pile area, or they will impede the traffic flow

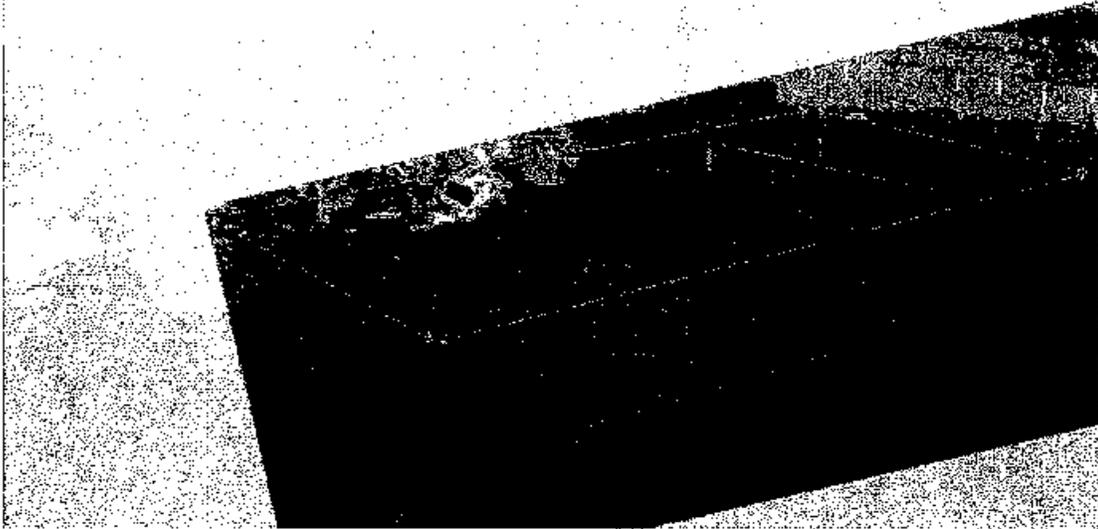


Exhibit 3

DS2 2Across Back Yard Mar 11, 2010 6:29:51 AM PST



Exhibit 4

DS2 2:Across Back Yard Mar 11, 2010 6:29:51 AM PST

**There must be a designated area to handle appliances
in order to meet the C.A.R. regulations**



Exhibit 5



Exhibit 6

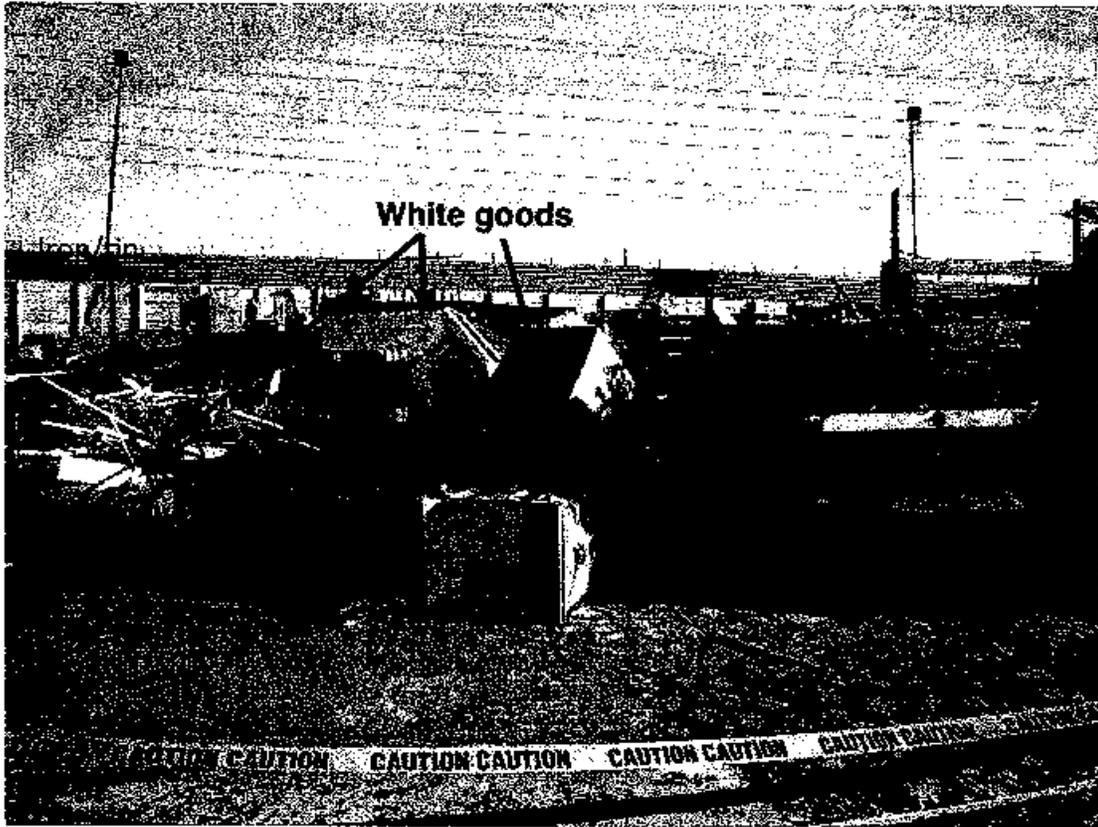


Exhibit 7



Exhibit 8

Customer	Commodity	Gross Weight	Tare Weight	Net Weight
1	Tinwht goods/mixed	4250		3200
2	tin/short	6320		5300
3	tin/wht goods/mixed	5820		4990
4	Tin/short	6930		5070
5	Tin/wht goods/mixed	3440		2950
6	tin/mixed	3710		3270
7	tin/short	7160		5750
8	tin/wht goods/mixed	3840		2900
9	tin/long	4260		4090
10	tin/mixed	5410		4720
11	tin/wht goods/mixed	5870		5160
12	tin/wht goods/mixed	4450		3930
13	tin/long/short	10860		6810
14	tin/wht goods/mixed	5680		4760
15	tin/wht goods/mixed	6220		5540
			Total Weight	15780
			Average Weight	1052
			Customers w/appliances	53%

Exhibit 9

DS2 2:Across Back Yard Mar 11, 2010 9:00:57 AM PST



Exhibit 10

Steel Scrap Yards – What must be included in an operation :

1. Ferrous Scale – Truck length – minimum 60 feet
2. Platform scales for non-ferrous handling
3. Receiving areas to dump material
4. Approach areas to scale for inbound traffic
5. Processing Areas for processing steel and sorting
6. Area for storing prepared materials. How many materials and how many piles?
7. Engine containment area
8. Loading area for semi-trucks or containers
9. Staging area for trucks or containers to handle flow
10. Area for container loading – minimum 80 feet for ramp and container
11. Approach area for container loading
12. Appliance handling area and staging
13. Hazardous storage areas for oils, grease, appliances
14. Waste oil containment area
15. Used gasoline area
16. Battery area
17. Freon area
18. Mercury switches, PCB capacitor storage
19. Diesel storage area for tank to be bermed- to fuel equipment
20. Equipment fueling area
21. Inside storage area for grease, oils, etc.
22. Employee parking
23. Scale house with readers customers can see from the outside
24. ADA restroom facilities
25. Area for outbound traffic to weigh out on scale
26. Excavator equipment areas with turn radius
27. Loader equipment areas
28. Equipment processing areas – must process to load into trucks
29. Maintenance area for equipment
30. Turn radius areas for large trucks
31. Water system for storm water containment
32. Oil containment plan
33. Storm Water Plan
34. Radiation Detectors
35. Storage containers for non-ferrous metals
36. Bin Staging areas for non ferrous
37. Non ferrous cleaning area
38. Bin storage
39. Concrete maintenance

Svitek, Andrew

From: John Rodriguez [statewidemetals@yahoo.com]
Sent: Wednesday, March 24, 2010 4:48 PM
To: srich@dpw.lacounty.gov
Cc: Svitek, Andrew; ANARAG@dpw.lacounty.gov; sburger@dpw.lacounty.gov
Subject: Fw: Richards questions document
Attachments: Answers to DPW questions.DOC

Sam,

Here is the answers to the document that you provided to me. Plot plans will be submitted in another email.
Thank you

John A. Rodriguez

Scale operation and material handling

1 Scale capable of handling at least 60ft trucks.

-As shown on Plot Plans, the measurement of the scale is 10'x 60'

2 Platform scale for non-ferrous materials handling.

-Statewide Metals will not need the use of a platform scale for non-ferrous handling. Statewide Metals will not be separating ferrous from non-ferrous metals. During buying hours, Statewide Metals will purchase mixed metals, ferrous and non-ferrous together and will sell them as a mixed load. This method will eliminate the need for a nonferrous platform scale.

3 Scale house with readers customers can see from the outside.

-An electronic weight meter is posted on the west wall of the outside of the building, which is visible from the scale. Also, an additional weight meter is positioned in front of the Weight Clerk's desk.

4 Processing, sorting, and storing of steel and other types of materials. This should include the number of anticipated piles.

-Statewide Metals anticipates 1-2 piles in the dump area. After product has been dropped, the John Deere 260 will scoop and push the product to the excavator processing area. This is where the excavator Cat-320 will make a pile. That same pile will be loaded, during the appointed times, clearing that area for the following day.

Statewide Metals will buy and sell metals as a mixed load, eliminating the need for separation of metals. Statewide Metals will be separating appliances from ferrous and non-ferrous metals. When an appliance is dropped, a load inspector will dolly the appliance to the designated appliance area shown on the plot plans. The appliances will stay in this location until pick up.

5 Bin staging and storage for non-ferrous materials.

-Statewide Metals will be selling mixed loads containing both ferrous and non-ferrous metals. Bins are used for storing and separating ferrous and non-ferrous metals that will be later sold as an individual load. Statewide Metals will not need the use of bins, due to the fact that Statewide Metals will not be separating metals.

6 Non ferrous materials cleaning.

-At this time, Statewide Metals does not intend to do any non-ferrous metal cleaning. Cleaning of non-ferrous metal is only used when separating ferrous from non-ferrous.

7 Appliance handling and staging.

-Shown on the plot plans on the NW corner of the Dump Area:
Statewide Metals has provided two (2) areas totaling 269.30 square feet, only for the holding of appliances. When appliances are dropped, they will be stacked in one of the two areas.

Statewide Metals will not be dismantling appliances but will be selling each appliance unit collected as a whole unit. Appliances will only be sold to authorized buyers and dismantlers.

At first glance, dismantling each appliance may seem more profitable. However, after careful calculations, Statewide Metals has found a very small profit margin and therefore does not plan to dismantle or drain appliances.

Statewide Metals will still apply for a appliance dismantling license.

8 Hazardous storage areas for oils, grease, waste oil containment, used gasoline, batteries, Freon, mercury switches, PCB capacitors, and other appliances.

-As previously stated (in answer for #7), Statewide Metals will not be dismantling appliances. Typically freon, mercury switches and PCB capacitors are found in household appliances.

-Batteries: Statewide Metals will not be purchasing any batteries; these are non-metal recyclable products; e.g. car batteries.

-Gasoline/Diesel: Statewide Metals will not purchase any product that has a gas tank or that is gasoline/diesel-powered. If product is bought containing any amount of gasoline/diesel in it, Statewide Metals will empty gasoline/diesel into a static-free plastic drum labeled "flammable" for both gasoline and diesel. The contents of the drum will be picked up and discarded by a waste removal company.

Also, Statewide Metals will advise our customers not to bring any product that contains any gasoline/diesel in it. Customers will be held responsible for the discarding of the gasoline/diesel prior to entering Statewide Metals.

Static-free plastic drums will be stored in a shed, which will be in an enclosed non-smoking area, until time of pick up.

Truck circulation and equipment handling/maintenance

1 Staging and loading area for semi-trucks and containers. If after-hours operations are not feasible, this will have to be done during regular business hours with the general customer circulation.

-Loading hours will predominately be held during the hours of 5pm-7pm, and will be made by appointment only.

-If the County, through the approval process, or management decides that it is necessary to load before the hours of 5pm-7pm, the protocol will be to set-up an appointment. This standard/method/protocol will be applied to both-"Closed Container rear loading" and "End Dump top loading." During both "Container rear loading" and "End Dump top loading," the entrance gate and exit gate will be closed. There will be absolutely no buying at this time. Only after all the loading is completed will buying once again resume.

Closing both entrance gate and exit gate during appointment-only-loading will reduce traffic build up.

-As shown in the plot plans, both staging areas for Closed Container rear loading and End Dump top loading are mapped.

2 Area for container loading – minimum of 80 feet for ramp and container.

-Shown on plot plans.

3 Approach area for container loading.

-Shown on plot plans.

4 Loader equipment.

-One (1) John Deere 260 Series 2 Tractor 7'Wx13'L.

-One (1) Cat-320 Excavator 12'Wx13'L.

5 Excavator equipment areas with turn radius. Your site plan only shows bobcats operation.

-Shown on plot plan.

-As shown on all plot plans submitted, the Excavator Cat-320 is located on the south end of the designated "Dump Area."

6 Equipment processing areas before loading into trucks.

-Shown on plot plan.

7 Equipment maintenance.

-If a piece of equipment, e.g. Excavator and/or John Deere, becomes inoperable or needs general maintenance, Statewide Metals will do one of two things:

1) Have equipment picked up, by appointment only, and sent to mechanic for repair
or

2) Do on-site maintenance.

On site maintenance for Excavator Cat-320 will be done at the location of the proposed placement of excavator. The Excavator will be parked and worked on at the West wall.

On-site maintenance for John Deere 260 will be done in the proposed placement of the John Deere 260. The John Deere 260 will be parked in the NW corner of the property.

8 Equipment fueling.

- Statewide Metals will contract General Petroleum for fueling of equipment. General Petroleum is a mobile Gas/Diesel supplier. General Petroleum will come as needed and only by appointment. The estimated time frame for refueling is every 2-4 days, however this estimation is dependant upon the amount of hours the equipment is in operation.

9 Diesel storage area for tank to be bermed- to fuel equipment.

-Statewide Metals will be contracting with General Petroleum for fueling needs. Statewide will not be storing diesel.

10 Inside storage for grease, oils, etc for equipment maintenance.

-Shown on plot plan.

-Statewide Metals will install one (1) or two (2) 10'x10' metal Tuff shed(s) on the South part of the property. The Tuff shed(s) will be locked at all times and will only be opened when needed. The Tuff shed(s) will house grease for lubrication of equipment in the form of grease guns, motor oil, absorbents, tool, rags, etc.

11 Oil containment plan.

-When any kind of oil spill occurs, a commonly used absorbent will be placed over the spilled area. After contents are dried, they will be shoveled up and placed in a plastic or metal drum. The contents will be stored in one of the two sheds, until picked up from a contracted/professional waste removal company.

12 Other maintenance equipment for general yard cleaning.

-Brooms, shovels, dust pans, rags, Windex etc.

13 Radiation Detectors.

-At this time, Statewide Metals does not have any plans to install a Radiation Detector. Installation of this particular piece of equipment is not mandatory in the Metal Recycling Industry.

14 Water system for storm water containment.

-Statewide Metals has installed a new storm drain system. Net filters catch any debris, and secondary net filters catch any smaller debris. A filter pump has been installed to regulate water flow. Nets will be cleaned once a week.

The property has been paved with a 1% slope so that storm water will flow to the drain.

-This is shown on all plot plans.

15 Employee parking. You should provide this information based on Department of Regional Planning required parking analysis.

- Shown on plot plan.

Svitek, Andrew

From: mona [mona@williamssoftware.com]
Sent: Tuesday, March 30, 2010 11:13 AM
To: Svitek, Andrew; srich@dpw.lacounty.gov; anarag@dpw.lacounty.gov; Sanabria, Jon
Subject: CUP R2008-01962
Attachments: specs2006.pdf; CUP R2008-01962.pdf

Hi All:

Here are some of our comments to the questions that Sam from Public Works requested from the tenant. Please include in the Commissioner's package. I have included the ISRI circular which describes material specifications.

Thank you,
Mona Howerton
Greg Williams
Williams Recycling

From: greg williams [mailto:greg@gregwms.net]
Sent: Tuesday, March 30, 2010 9:54 AM
To: Mona-Portable
Subject:

March 30, 2010

Re: CUP R2008-01962

Sent via email

This writing is to respond to the applicant's provided answers to the Department's questions. The applicant has not answered the question of processing, sorting and storing steel materials. The applicant's answer of buying into one or two mixed piles is not real world and less than truthful about the required area to handle the material. The mixed material needs to be sorted, segregated, stored and sized into piles. Non-ferrous can't be included into the mixed material.

Consumers (buyers) of steel have minimum requirements for cleanness and size. This requirement is not at the pleasure of the seller of steel. The applicant's counsel suggested a "new" way of doing business, which would be different. There is no new way of selling steel. Exhibit "A" outlines the minimum requirements for cleanness and size of steel products. All consumers (buyers) of steel subscribe to these requirements. Some buyers also require certification of radiation detection prior to shipment.

This applicant has been less than truthful in the required space for handling steel scrap. 269 sq feet of space for appliances handling is the size of an office. Further absurd is the idea of closing to load trucks. This is not practical or enforceable. Additionally, the applicant included another loading process not included in the plot plan, semi-dumps. This is a much different loading process requiring different equipment and more loading room.

This steel facility or any other steel-processing yard requires minimum activities including, receiving, processing, sorting and storing of materials. This requires space. The facility as described (+_3000 sq ft) will not work. The ebb and flow of the yard will back into the traffic areas and out to the street. This is exactly what happened when this yard last operated without permit. Our business and Alameda St. was disrupted by the traffic problems.

The following is a list of proposed fixes for the unfixable:

1. Flag person on Alameda St.
2. After hours loading
3. Single pile of scrap (mixed)
4. Closing the facility to load scrap (load times on plot plan inaccurate)

This use is ill conceived for the site. There are constraints and the unintended consequence at a minimum will be traffic problems for Alameda St.

Sincerely,

Greg Williams, CCIM, MBA

Encl: Exhibit "A"
ISRI Circular -PDF

Exhibit "A"

General Information

a. Cleanness. All grades shall be free of dirt, nonferrous metals, or foreign material of any kind, and excessive rust and corrosion. However, the terms "free of dirt, nonferrous metals, or foreign material of any kind" are not intended to preclude the accidental inclusion of negligible amounts where it can be shown that this amount is unavoidable in the customary preparation and handling of the particular grade involved.

b. Off-grade material. The inclusion in a shipment of a particular grade of iron and steel scrap of a negligible amount of metallic material which exceeds to a minor extent the applicable size limitations, or which fails to a minor extent to meet the applicable requirements as to quality or kind of material, shall not change the classification of the shipment, provided it can be shown that the inclusion of such off-grade material is unavoidable in the customary preparation and handling of the grade involved.

c. Residual alloys. Wherever the term "free of alloys" is used in the classifications given herein, it shall mean that any alloys contained in the steel are residual and have not been added for the purpose of making an alloy steel. Steel scraps shall be considered free of alloys when the residual alloying elements do not exceed the following percentages:

Nickel .45% Molybdenum .10%

Chromium .20% Manganese 1.65%

The combined residuals other than manganese shall not exceed a total of 0.60 percent.

d. Deviations. Any deviations from the general classifications of iron and steel scrap may be consummated by mutual agreement between buyer and seller.

200 No. 1 heavy melting steel.

Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 24 inches (charging box size) prepared in a manner to insure compact charging.

General Information

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201 No. 1 heavy melting steel 3 feet x 18 inches.

Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 36 x 18 inches (charging box size) prepared in a manner to insure compact charging.

202 No. 1 heavy melting steel 5 feet x 18 inches.

Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 18 inches (charging box size) prepared in a manner to insure compact charging.

203 No. 2 heavy melting steel.*

Wrought iron and steel scrap, black and galvanized, 1/8 inch and over in thickness, charging box size to include material not suitable as No. 1 heavy melting steel. Prepared in a manner to insure compact charging.

204 No. 2 heavy melting steel.*

Wrought iron and steel scrap, black and galvanized, maximum size 36 x 18 inches. May include all automobile scrap properly prepared.

205 No. 2 heavy melting steel 3 feet x 18 inches.

Wrought iron and steel scrap, black and galvanized, maximum size 36 x 18 inches. May include automobile scrap, properly prepared; however, to be free of sheet iron or thin gauged material.

206 No. 2 heavy melting steel 5 feet x 18 inches.

Wrought iron and steel scrap, black and galvanized, maximum size 60 x 18 inches. May include automobile scrap, properly prepared; however, to be free of sheet iron or thin gauged material.

207 No. 1 busheling.

Clean steel scrap, not exceeding 12 inches in any dimensions, including new factory busheling (for example, sheet clippings, stampings, etc.). May not include old auto body and fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing over 0.5 percent silicon.

207A New black sheet clippings.

For direct charging, maximum size 8 feet by 18 inches, free of old automobile body and fender stock, metal coated, lined, vitreous enameled and electrical sheet containing over 0.5 percent silicon. Must lay reasonably flat in car.

208 No. 1 bundles.

New black steel sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrel wound bundles or skeleton reels, tightly secured. May include chemically detinned material. May not include old auto body or fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing over 0.5 percent silicon.

209 No. 2 bundles.

Old black and galvanized steel sheet scrap, hydraulically compressed to charging box size and weighing not less than 75 pounds per cubic foot. May not include tin or lead-coated material or vitreous enameled material.

210 Shredded scrap.

Homogeneous iron and steel scrap, magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 50 pounds per cubic foot.

211 Shredded scrap.

Homogeneous iron and steel scrap magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 70 pounds per cubic foot.

Guidelines for Ferrous Scrap: FS-2006

CODE ITEM CODE ITEM

212 Shredded clippings.

Shredded 1000 series carbon steel clippings or sheets. Material should have an average density of 60 pounds per cubic foot.

213 Steel can bundles.

Steel can scrap compressed to charging box size and weighing not less than 75 pounds per cubic foot. Cans may be baled without removal of paper labels, but free of other non-metallics. May include up to 5 gallon tin coated containers.

214 No. 3 bundles.

Old sheet steel, compressed to charging box size and weighing not less than 75 pounds per cubic foot. May include all coated ferrous scrap not suitable for inclusion in No. 2 bundles.

215 Incinerator bundles.

Tin can scrap, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Processed through a recognized garbage incinerator.

216 Terne plate bundles.

New terne plate sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrel wound bundles or skeleton reels, tightly secured.

217 Bundled No. 1 steel.

Wrought iron and/or steel scrap 1/8 inch or over in thickness, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Free of all metal-coated material.

218 Bundled No. 2 steel.

Wrought iron or steel scrap, black or galvanized, 1/8

inch and over in thickness, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Auto body and fender stock, burnt or hand stripped, may constitute a maximum of 60 percent by weight. (This percent based on makeup of auto body, chassis, driveshafts, and bumpers.) Free of all coated material, except as found on automobiles.

219 Machine shop turnings.

Clean steel or wrought iron turnings, free of iron borings, nonferrous metals in a free state, scale, or excessive oil. May not include badly rusted or corroded stock.

220 Machine shop turnings and iron borings.

Same as machine shop turnings but including iron borings.

221 Shoveling turnings.

Clean short steel or wrought iron turnings, drillings, or screw cuttings. May include any such material whether resulting from crushing, raking, or other processes. Free of springy, bushy, tangled or matted material, lumps, iron borings, nonferrous metals in a free state, grindings, or excessive oil.

222 Shoveling turnings and iron borings.

Same as shoveling turnings, but including iron borings.

223 Iron borings.

Clean cast iron or malleable iron borings and drillings, free of steel turnings, scale, lumps or excessive oil.

224 Auto slabs.

Clean automobile slabs, cut 3 feet x 18 inches and under.

225 Auto slabs.

Clean automobile slabs, cut 2 feet x 18 inches and under.

226 Briquetted iron borings.

Analysis and density to consumer's specifications.

227 Briquetted steel turnings.

Analysis and density to consumer's specifications.

228 Mill scale.

Dark colored, ranging from blue to black, ferro-magnetic iron oxide forming on the surface of steel articles during heating and working.

*The identical designations given for these two classifications are in accordance with established industry practices in specifying the materials desired.

Electric Furnace Casting and Foundry Grades

229 Billet, bloom and forge crops.

Billet, bloom, axle, slab, heavy plate and heavy forge crops, containing not over 0.05 percent phosphorus or sulphur and not over 0.5 percent silicon, free from alloys. Dimensions not less than 2 inches in thickness, not over 18 inches in width, and not over 36 inches in length.

230 Bar crops and plate scrap.

Bar crops, plate scrap, forgings, bits, jars, and tool joints, containing not over 0.05 percent phosphorus or sulphur, not over 0.5 percent silicon, free from alloys. Dimensions not less than 1/2inch in thickness, not over 18 inches in width, and not over 36 inches in length.

231 Plate and structural steel, 5 feet and under.

Cut structural and plate scrap, 5 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4inch thickness, not over 5 feet in length and 18 inches in width. Phosphorus or sulphur not over 0.05 percent.

232 Plate and structural steel, 5 feet and under.

Cut structural and plate scrap, 5 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4inch thickness, not over 5 feet in length and 24 inches in width. Phosphorus or sulphur not over 0.05 percent.

233 Cast steel.

Steel castings not over 48 inches long or 18 inches wide, and 1/4inch and over in thickness, containing not over 0.05 percent phosphorus or sulphur, free from alloys and attachments. May include heads, gates, and risers.

234 Punchings and plate scrap.

Punchings or stampings, plate scrap, and bar crops containing not over 0.05 percent phosphorous or sulphur and not over 0.5 percent silicon, free from alloys.

SCRAP SPECIFICATIONS CIRCULAR 2006

16 Guidelines for Ferrous Scrap

CODE ITEM CODE ITEM

All materials cut 12 inches and under, and with the exception of punchings or stampings, at least 1/8 inch in thickness. Punchings or stampings under 6 inches in diameter may be any gauge.

235 Electric furnace bundles.

New black steel sheet scrap hydraulically compressed into bundles of size and weight as specified by consumer.

236 Cut structural and plate scrap, 3 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch in thickness, not over 3 feet in length and 18 inches in width. Phosphorus or sulphur not over 0.05 percent.

237 Cut structural and plate scrap, 2 feet and under. Same as cut structural and plate scrap, 3 feet and under, except for length.

238 Cut structural and plate scrap, 1 foot and under. Same as cut structural and plate scrap, 3 feet and under, except for length.

239 Silicon busheling. Clean silicon bearing steel scrap, not exceeding 12 inches in any dimension, including new factory busheling (for example, sheet clippings, stampings, etc.), having a silicon content of 0.05 percent to 5.0 percent.

240 Silicon Clippings. Clean steel scrap, including new factory busheling (for example, sheet clippings, stampings, etc.), may not include old auto body and fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing minimum 1 percent silicon.

241 Chargeable ingots and ingot butts. Chargeable ingots and ingot butts for material to be suitable and acceptable to the consumer containing not over 0.05 percent phosphorus or sulphur and not over 0.05 percent silicon free of alloys.

242 Foundry steel, 2 feet and under. Steel scrap 1/8 inch and over in thickness, not over 2 feet in length or 18 inches in width. Individual pieces free from attachments. May not include nonferrous metals, cast or malleable iron, cable, vitreous enameled, or metal coated material.

243 Foundry steel, 1 foot and under. Same specifications as 2-foot material, except for length.

244 Springs and crankshafts. Clean automotive springs and crankshafts, either new or used.

245 Alloy free turnings. Clean shoveling steel turnings free from lumps, tan-

gled or matted material, iron borings, or excessive oil containing not more than 0.05 percent phosphorus or sulphur, and free of alloys.

246 Alloy free short shoveling steel turnings.

Clean shoveling steel turnings, free of lumps, tangled or matted material, iron borings, or excessive oil, containing not more than 0.05 percent phosphorus or sulphur, and free of alloys.

247 Alloy free machine shop turnings.

Clean steel turnings, free of iron borings or excessive oil, containing not more than 0.05 percent phosphorus or sulphur, and free of alloys. May not include badly rusted or corroded stock.

248 Hard steel cut 30 inches and under.

Automotive steel consisting of rear ends, crankshafts, driveshafts, front axles, springs, and gears prepared 30 inches and under. May not include miscellaneous small shoveling steel or any pieces too bulky for gray iron foundry use.

249 Chargeable slab crops.

Chargeable slab crops for material to be suitable and acceptable to the consumer containing not over 0.05 percent phosphorus and 0.05 percent sulphur and not over 0.05 percent silicon and free of alloys.

250 Silicon bundles.

Silicon sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot, having a silicon content of 0.50 percent to 5.0 percent.

251 Heavy turnings.

Short, heavy steel turnings, containing not over 0.05 percent phosphorus or sulphur and free of alloys. May include rail chips. May not include machine shop or other light turnings and must weigh not less than 75 pounds per cubic foot in the original state of production.

Specially Processed Grades to Meet Consumer Requirements

Grades of scrap prepared especially to meet with steel mill or foundry requirements, individual specifications to be agreed on between consumer and supplier.

Cast Iron Grades

252 Cupola cast.

Clean cast iron scrap such as columns, pipes, plates,

and castings of a miscellaneous nature, including automobile blocks and cast iron parts of agricultural and other machinery. Free from stove plate, burnt iron, brake shoes or foreign material. Cupola size, not over 24 inches x 30 inches, and no piece over 150 pounds in weight.

253 Charging box cast.

Clean cast iron scrap in sizes not over 60 inches in length or 30 inches in width, suitable for charging into an open hearth furnace without further preparation.

Free from burnt iron, brake shoes, or stove plate.

254 Heavy breakable cast.

Cast iron scrap over charging box size or weighing more than 500 pounds. May include cylinders and driving wheel centers. May include steel which does not exceed 10 percent of the casting by weight.

255 Hammer block or bases.

Cast iron hammer blocks or bases.

INSTITUTE OF SCRAP RECYCLING INDUSTRIES, INC. 17

Guidelines for Ferrous Scrap

CODE ITEM CODE ITEM

256 Burnt iron.

Burnt cast iron scrap, such as stove parts, grate bars, and miscellaneous burnt iron. May include sash weights or window weights.

257 Mixed cast.

May include all grades of cast iron except burnt iron.

Dimensions not over 24 inches x 30 inches and no piece over 150 pounds in weight.

258 Stove plate, clean cast iron stove.

Free from malleable and steel parts, window weights, plow points, or burnt cast iron.

259 Clean auto cast.

Clean auto blocks; free of all steel parts except camshafts, valves, valve springs, and studs. Free of nonferrous and non-metallic parts.

260 Unstripped motor blocks.

Automobile or truck motors from which steel and non-ferrous fittings may or may not have been removed.

Free from driveshafts and all parts of frames.

261 Drop broken machinery cast.

Clean heavy cast iron machinery scrap that has been broken under a drop. All pieces must be of cupola size, not over 24 inches x 30 inches, and no piece over 150

pounds in weight.

262 Clean auto cast, broken, not degreased.

Clean auto blocks, free of all steel parts except camshafts, valves, valve springs and studs. Free of nonferrous and non-metallic parts, and must be broken to cupola size, 150 pounds or less.

263 Clean auto cast, degreased.

Free of all steel parts except camshafts, valves, valve springs, and studs. Free of nonferrous and non-metallic parts, and must be broken into cupola size, 150 pounds or less.

264 Malleable.

Malleable parts of automobiles, railroad cars, locomotives, or miscellaneous malleable iron castings. Free from cast iron and steel parts and other foreign material.

265 Broken ingot molds and stools.

Broken ingot molds and stools, cast iron, maximum size 2 feet x 3 feet x 5 feet.

266 Unbroken ingot molds and stools.

Unbroken ingot molds and stools, cast iron.

Special Boring Grades

267 No. 1 chemical borings.

New clean cast or malleable iron borings and drillings containing not more than 1 percent oil, free from steel turnings, or chips, lumps, scale, corroded or rusty material.

268 Briquetted cast iron borings, hot process.

Cast iron borings, heated, briquetted, to a density of approximately 85 percent, oil and water content under 1 percent.

269 Briquetted cast iron borings, cold process.

Cast iron boring briquettes, free of steel and nonferrous material, hydraulically compressed into a cohesive solid, reasonably free of oil, and having a density of not less than 60 percent.

270 Malleable borings.

Clean malleable iron borings and drillings, free of steel turnings, scale, lumps and excessive oil.

271 No. 2 chemical borings.

New clean cast or malleable iron borings and drillings, containing not more than 1.5 percent oil, free from steel turnings, or chips, lumps, scale, corroded or rusty material.

Steel From Scrap Tires

General Guidelines

Items not covered in the specifications, and any variations in the specification, are subject to special arrangement between buyer and seller. Percentages listed below are by weight.

Preparation

Consumer and supplier to agree upon preparation for transport, such as the following:

Loose—Whole.

Loose—Chopped. If wire is chopped or shredded, parties may wish to specify the means of processing and/or characteristics of the final product (density, length of pieces, etc.).

Baled. Bales of wire should maintain their form during loading, shipment, unloading, storage, and handling typical of that done at a consuming facility, unless otherwise specified.

Baled—High Density. Hydraulically compressed, no dimension larger than 24", density of at least 75 pounds per square foot.

Baled—HRB/Low Density. Density of less than 75 pounds per square foot. Each bale secured with sufficient number of bale ties drawn tight to insure a satisfactory delivery.

Other Means of Preparation. Individual specifications to be agreed upon between consumer and supplier.

272 Pulled bead wire (Truck)—Grade 1.

Not chopped; made up of loops of wire. Less than five percent (<5%) rubber/fiber.

273 Pulled bead wire (Truck)—Grade 2.

Not chopped; made up of loops of wire. Five to ten percent (5-10%) rubber/fiber.

274 Pulled bead wire (Truck)—Grade 3.

Not chopped; made up of loops of wire. Greater than ten percent (>10%) rubber/fiber.

275 Pulled bead wire (Passenger)—Grade 1.

Not chopped; made up of loops of wire. Less than five percent (<5%) rubber/fiber.

276 Pulled bead wire (Passenger)—Grade 2.

Not chopped; made up of loops of wire. Five to ten percent (5-10%) rubber/fiber.

SCRAP SPECIFICATIONS CIRCULAR 2006

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277 Pulled bead wire (Passenger)—Grade 3.

Not chopped; made up of loops of wire. Greater than ten percent (>10%) rubber/fiber.

278 Processed tire wire (Ferrous)—Grade 1.
Chopped. Less than two percent (<2%) rubber/fiber.
279 Processed tire wire (Ferrous)—Grade 2.
Chopped. Less than five percent (<5%) rubber/fiber.
280 Processed tire wire (Ferrous)—Grade 3.
Chopped. Five to ten percent (5-10%) rubber/fiber.
281 Processed tire wire (Ferrous)—Grade 4.
Chopped. Ten to twenty percent (10-20%) rubber/fiber.
282 Processed tire wire (Ferrous)—Grade 5.
Chopped. Greater than twenty percent (>20%) rubber/fiber.

Railroad Ferrous Scrap*

Specifications of Association of American Railroads promulgated by its Purchases and Materials Management Division (Revised 1973)

(2) Axles, Steel.

Solid car and/or locomotive friction bearing, 8 inch diameter and under (free of axles with key-way between wheel seats, no axles of shorter lengths than distance between wheel seats to be included).

(2A) Axles, Steel.

Solid car and/or locomotive friction bearing over 8 inch diameter (free of axles with key-way between wheel seats, no axles of shorter length than distance between wheel seats to be included).

(3) Axles, Steel.

Roller bearing 8 inch diameter and under (no axles of shorter lengths than distance between wheel seats to be included).

(3A) Axles, Steel.

Roller bearing over 8 inch diameter (no axles of shorter length than distance between wheel seats to be included).

(4) Spikes, Track Bolts and Nuts, and Lock Washers, may include Rail Anchors.

(5) Tie Plates.

Steel.

(6) Rail Joints, Angle and/or Splice Bars.

Steel.

(9) Bolsters and/or Truck Sides, Frames: Uncut.

Cast steel.

(11) Cast Steel, No. 2.

Steel castings, over 18 inches wide and/or over 5 feet long.

(11A) Cast Steel, No. 1.

Steel castings, 18 inches and under, not over 5 feet long, including cut truck side frames and bolsters.

(12) Cast Iron, No. 1.

Cast iron scrap, such as columns, pipes, plates, and/or castings of miscellaneous nature, but free from stove plates, brake shoes, and burnt scrap. Must be cupola size, not over 24 x 30 inches in dimension and no piece to weigh over 150 pounds. Must be free from foreign material.

(13) Cast Iron, No. 2.

Pieces weighing over 150 pounds, but not more than 500 pounds. Free from burnt cast.

(14) Cast Iron, No. 3.

Pieces weighing over 500 pounds; includes cylinders, driving wheel centers and/or all other castings. (Free from hammer blocks or bases.)

(15) Cast Iron, No. 4.

Burnt cast iron scrap, such as grate bars, stove parts and/or miscellaneous burnt scrap.

(16) Cast Iron Brake Shoes.

Brakes shoes of all types except composition-filled shoes.

(17) Couplers and/or Knuckles.

Railroad car and/or locomotive steel couplers, knuckles and/or locks stripped clean of all other attachments.

(18) Frogs and/or Switches, uncut.

Steel frogs and switches that have not been cut apart, exclusive of manganese.

(18A) Railbound Manganese Frogs and Switch Points with manganese inserts that have not been cut apart.

(23) Malleable.

Malleable parts of automobiles, railroad cars, locomotive and/or miscellaneous malleable castings.

(24) Melting Steel, Railroad No. 1.

Clean wrought iron or steel scrap, 1/4inch and over in thickness, not over 18 inches in width, and not over 5 feet in length. May include pipe ends and material 1/8 inch to 1/4inch in thickness, not over 15 inches x 15 inches. Individual pieces cut so as to lie reasonably flat in charging box.

(27) Rail, Steel No. 1.

Standard section tee rails, original weight 50 pounds per yard or heavier, 10 feet long and over. Suitable for rerolling into bars and shapes. Free from bent and

twisted rails, frog, switch, and guard rails, or rails with split heads and broken flanges. Continuous welded rail may be included provided no weld is over 9 inches from the end of the piece of rail.

(28A) Rail, Steel No. 2 Cropped Rail Ends.

Standard section, original weight of 50 pounds per yard and over, 18 inches long and under.

(28B) Rail, Steel No. 2 Cropped Rail Ends.

Standard section, original weight of 50 pounds per yard and over, 2 feet long and under.

(28C) Rail, Steel No. 2 Cropped Rail Ends.

Standard section, original weight 50 pounds per yard and over, 3 feet long and under.

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(29) Rail, Steel No. 3.

Standard section tee, girder, and/or guard rails, to be free from frog and switch rails not cut apart, and contain no manganese, cast, welds, or attachments of any kind except angle bars. Free from concrete, dirt, and foreign material of any kind.

(30) Sheet Scrap, No. 1.

Under 3/16inch thick, may include hoops, band iron and/or steel, scoops and/or shovels (free of wood).

Must be free from burnt or metal coated material, cushion, or other similar springs.

(31) Sheet Scrap, No. 2.

Galvanized or tinned material and/or gas retorts, and/or any other iron or steel material not otherwise classified.

(32) Steel, Tool.

(Specify kind in offering.)

(33) Steel, Manganese.

All kinds of manganese, rail, guard rails, frogs and/or switch points, cut or uncut.

(34) Steel, Spring.

Coil and/or elliptical, minimum thickness 1/4inch, may be assembled or cut apart.

(34A) Steel, Spring.

Coil only.

(35) Structural, Wrought Iron and/or Steel Uncut.

All steel or steel mixed with iron from bridges, structures and/or equipment that has not been cut apart,

may include uncut bolsters, brakebeams, steel trucks, underframes, channel bars, steel bridge plates, frog and/or crossing plates and/or other steel of similar character.

(36) Tires.

All locomotive, not cut to specified lengths.

(38) Turnings. No. 1.

Heavy turnings from wrought iron and/or steel railroad axles or heavy forgings and/or rail chips, to weigh not less than 75 pounds per cubic foot. Free from dirt or other foreign material of any kind. Alloy steel scrap may be excluded from these specifications by mutual agreement between buyer and seller.

(38A) Turnings, Drillings and/or Borings. No. 2.

Cast, wrought, steel and/or malleable iron borings, turnings and/or drillings mixed with other metals.

(40) Wheels, No. 1.

Cast iron car wheels.

(42) Wheels, No. 3.

Solid cast steel, forged, pressed and/or rolled steel car and/or locomotive wheels, not over 42 inches diameter. (Specify kind in offering.)

(45) Destroyed Steel Cars.

Bodies of steel cars cut apart sufficiently to load.

(Specify kind.)

(45A) Destroyed Steel Car Sides and Box Car Roofs.

Cut to a maximum length of... and a maximum width of... suitable for use in super presses and shears without additional preparation.

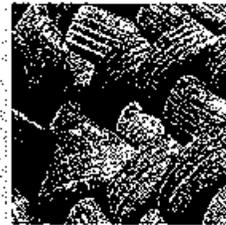
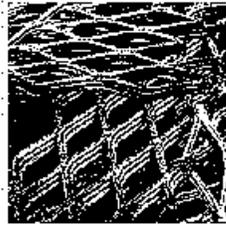
*Specifications in force as of publication date.

SCRAP SPECIFICATIONS CIRCULAR 2006

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CODE ITEM CODE ITEM

Scrap Specifications Circular



2006

**Guidelines for Nonferrous Scrap • Ferrous Scrap • Glass Cullet
Paper Stock • Plastic Scrap • Electronics Scrap • Tire Scrap**



Voice of the Recycling Industry

Institute of
Scrap Recycling
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**Guidelines for
Nonferrous Scrap
Ferrous Scrap
Glass Cullet
Paper Stock
Plastic Scrap
Electronics Scrap
Tire Scrap**



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PREFACE

The standard specifications included in this Circular are intended to assist members in the buying and selling of their materials and products.

These specifications are derived from many sectors of the metals, paper stock, plastics, glass, and electronics industries and are constructed to represent the quality or composition of the materials bought and sold in the industry. The specifications are internationally accepted and are used throughout the world to trade the various commodities.

Parties to a transaction may specify particular variations or additions to these specifications as are suited for their specific transactions and for their individual convenience. Any deviation from the standard specifications, however, should be mutually agreed to and so stipulated in writing by the parties to the transactions.

ISRI maintains an Arbitration Service as a means of enabling members to settle differences between themselves or between one of them and a non-member.

In addition, the "Guidelines for Metals Transactions" contain supplementary information that will aid members in completing their business transactions. It is recommended that these Guidelines be reviewed and that members use them in conjunction with the actual specifications in the conduct of their business.

Changes in the 2006 edition: This edition contains several changes to guidelines. The design has been updated to make the circular easier to use.

Nonferrous Specifications

Specifications for Honey and Zorba have been updated.

New guidelines have been added:

Tally (page 8)

Elmo (page 12)

Shelmo (page 12)

Nonferrous Specifications have been sorted by type of metal rather than alphabetical. See the Table of Contents for more information.

Paper Stock Specifications

Guidelines for Paper Stock Domestic Transactions contain new language.

ISRI's Scrap Specifications Circular is published in print once per year. To insure you have the most up-to-date version, visit www.isri.org/specs.

Issued by:



ISRI

Voice of the Recycling Industry

Institute of
Scrap Recycling
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CIRCULAR 2006 BECAME EFFECTIVE May 3, 2006,
AND PREVAILS UNTIL SUPERSEDED.

Rules Governing the Procedures for the Addition, Amendment, or Withdrawal of Specifications

- 1.0 *Initiation of Request.* Any person may file a request to add, amend or withdraw a specification by submitting such request in writing to the ISRI President.
- 2.0 The President shall refer such request to the Chairman of ISRI's Specifications Committee (the "Committee"), with copies to:
 - A. ISRI's Officers;
 - B. The chairman of any ISRI Division and/or Committee that might be affected by the specification.
- 3.0 *Notice.* Following its receipt, notice of the request shall be inserted in the *ISRI Focus* and a daily national trade publication such as *American Metal Market*. Such notice shall state:
 - A. The date, time and place at which the request will be considered by the Committee;
 - B. That the proceeding at which the request will be considered shall be open to the public;
 - C. That interested parties may participate in the proceeding by personal appearance or by submitting written comments;
 - D. A summary of the specification and the matter to be considered at the hearing.
- 4.0 *Committee Action.* Following presentation by all interested parties, the Committee shall review the request and:
 - A. Act upon it immediately, as set forth in Section 4.1; or
 - B. Refer it to a subcommittee for review and recommendation for action by the full Committee at its next meeting.
- 4.1 The Committee shall summarize the positions advocated by the various parties interested in the request and recommend to ISRI's Board of Directors what action should be taken.
- 5.0 *Board of Directors Action.* The Board of Directors, at its quarterly meeting at which the report and recommendation of the Committee has been made, shall adopt, amend, or reject the recommendation or table it pending further review and recommendation by the Committee.
- 5.1 Notice of the action taken by the Board shall be given to all interested parties who actively participated in the Committee proceeding and any other persons who have requested in writing notice of the Board's action. Notice of said action also shall be inserted in the *ISRI Focus* following the Board meeting at which said action was taken.
- 6.0 *Appeal.* On or before thirty days after the date of the notice required in Section 5.1, any party may appeal the decision of the Board by written notice to the President. Said appeal shall state the reasons thereof and the requested action to be taken. Notice of said appeal shall be given in accordance with Section 3.0.
- 6.1 The appeal shall be heard by the Board at its next quarterly meeting following receipt thereof.
- 6.2 The appellant and all interested parties shall be given at least twenty days notice of the date, time and place of the hearing, and like notice shall be inserted in the *ISRI Focus* at least twenty days prior to the hearing.
- 6.3 At the hearing, the appellant and any other interested party may appear either in person or by written presentation and state their reasons for the appeal.
- 6.4 The Board, following said hearing, shall review and act upon the appeal request. Notice of the Board's action shall be given in accordance with Section 5.1.
- 7.0 *Records.* ISRI shall maintain for not less than five years following the date of termination of the proceedings, records of the original request, summaries of the deliberations and recommendations of the Committee, action of the Board, summaries of the appeal and final decision, if any, of the Board, together with the positions of interested parties, copies of notices sent to interested parties and inserted in the *ISRI Focus* and national trade publications, written statements, and the reasons for recommendation and final action by the Committee and the Board.
- 7.1 Said records shall be available for review by the public upon reasonable notice.

Guidelines for Nonferrous Scrap: NF-2006

Note: When the individual scrap grades in this Circular, denoted by the various code words, are used, an agreement between parties is also bound by the terms of "Apple" as it appears below, unless the terms and conditions of a specific contract provide otherwise, in which case the specific contractual provisions shall govern.

CODE ITEM

Apple Nonferrous Terms

- a. Delivery of more or less of the specified quantity up to 3 percent is permissible.
- b. A ton shall be understood to be 2,000 pounds, unless otherwise specified.
- c. If any portion of the goods covered by a contract are unshipped or undelivered within the time specified in a contract, then that portion is subject to cancellation by the buyer and/or the buyer has the right to hold the seller responsible for substantiated damages.
If, because of embargo and/or other conditions of force majeure, a delivery or shipment cannot be made by the time specified, the contract shall remain valid and shall be completed promptly upon lifting of the embargo and/or conditions of force majeure and the terms of said contract shall not be changed.
- d. If for any portion of a contract the buyer fails in a timely manner to open a Letter of Credit and/or fails to provide proper conveyance and/or shipping instructions as specified in the contract, then that portion is subject to cancellation by the seller and/or the seller has the right to hold the buyer responsible for substantiated damages.
If, because of embargo and/or other conditions of force majeure, a delivery or shipment cannot be made by the time specified, the contract shall remain valid and shall be completed promptly upon lifting of the embargo and/or conditions of force majeure and the terms of said contract shall not be changed.
- e. If a significant weight or quality difference is apparent, the seller should be notified promptly and, if requested, another weight or quality determination should be taken. Seller and/or buyer should be given the opportunity to appoint an independent surveyor or a representative to verify weights and/or quality.
For purposes of this section, the meaning of the word "significant" shall be determined by agreement between buyer and seller, depending on the commodities and their values.
- f. If it is mutually determined that goods delivered do not conform to the description specified in the contract, then the shipment is subject to rejection or downgrade.
Disposition of, replacement of, and/or financial adjustment for rejected material shall be subjected to mutual agreement between buyer and seller. Seller is responsible for freight costs.
Buyer is expected, however, to exert every effort to limit rejections only to that portion of the shipment which is unsortable and to return the rejected portion promptly upon request, if government regulations permit.

CODE ITEM

RED METALS

Barley No. 1 COPPER WIRE

Shall consist of No. 1 bare, uncoated, unalloyed copper wire, not smaller than No. 16 B & S wire gauge. Green copper wire and hydraulically compacted material to be subject to agreement between buyer and seller.

Berry No. 1 COPPER WIRE

Shall consist of clean, untinned, uncoated, unalloyed copper wire and cable, not smaller than No. 16 B & S wire gauge, free of burnt wire which is brittle. Hydraulically briquetted copper subject to agreement.

Birch No. 2 COPPER WIRE

Shall consist of miscellaneous, unalloyed copper wire having a nominal 96% copper content (minimum 94%) as determined by electrolytic assay. Should be free of the following: Excessively leaded, tinned, soldered copper wire; brass and bronze wire; excessive oil content, iron, and non-metallics; copper wire from burning, containing insulation; hair wire; burnt wire which is brittle; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement.

Candy No. 1 HEAVY COPPER

Shall consist of clean, unalloyed, uncoated copper clippings, punchings, bus bars, commutator segments, and wire not less than 1/16 of an inch thick, free of burnt wire which is brittle; but may include clean copper tubing. Hydraulically briquetted copper subject to agreement.

Cliff No. 2 COPPER

Shall consist of miscellaneous, unalloyed copper scrap having a nominal 96% copper content (minimum 94%) as determined by electrolytic assay. Should be free of the following: Excessively leaded, tinned, soldered copper scrap; brasses and bronzes; excessive oil content, iron and non-metallics; copper tubing with other than copper connections or with sediment; copper wire from burning, containing insulation; hair wire; burnt wire which is brittle; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement.

Clove No. 1 COPPER WIRE NODULES

Shall consist of No. 1 bare, uncoated, unalloyed copper wire scrap nodules, chopped or shredded, free of tin, lead, zinc, aluminum, iron, other metallic impurities, insulation, and other foreign contamination. Minimum copper 99%. Gauge smaller than No. 16 B & S wire and hydraulically compacted material subject to agreement between buyer and seller.

Cobra No. 2 COPPER WIRE NODULES

Shall consist of No. 2 unalloyed copper wire scrap nodules, chopped or shredded, minimum 97% copper. Maximum metal impurities not to exceed 0.50% aluminum and 1% each of other metals or insulation.

CODE	ITEM	CODE	ITEM
	Hydraulically compacted material subject to agreement between buyer and seller.	Eland	HIGH GRADE-LOW LEAD BRONZE SOLIDS It is recommended these materials be sold by analysis.
Cocoa	COPPER WIRE NODULES Shall consist of unalloyed copper wire scrap nodules, chopped or shredded, minimum 99% copper. Shall be free of excessive insulation and other non-metallics. Maximum metal impurities as follows: Aluminum .05% Antimony .01% Tin .25% Iron .05% Nickel .05% Hydraulically compacted material subject to agreement between buyer and seller.	Elder	GENUINE BABBITT-LINED BRASS BUSHINGS Shall consist of red brass bushings and bearings from automobiles and other machinery, shall contain not less than 12% high tin-base babbitt, and shall be free of iron-backed bearings.
Dream	LIGHT COPPER Shall consist of miscellaneous, unalloyed copper scrap having a nominal 92% copper content (minimum 88%) as determined by electrolytic assay and shall consist of sheet copper, gutters, downspouts, kettles, boilers, and similar scrap. Should be free of the following: Burnt hair wire; copper clad; plating racks; grindings; copper wire from burning, containing insulation; radiators and fire extinguishers; refrigerator units; electrotype shells; screening; excessively leaded, tinned, soldered scrap; brasses and bronzes; excessive oil, iron and non-metallics; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement. Any items excluded in this grade are also excluded in the higher grades above.	Elias	HIGH LEAD BRONZE SOLIDS AND BORINGS It is recommended that these materials be sold on sample or analysis.
Drink	REFINERY BRASS Shall contain a minimum of 61.3% copper and maximum 5% iron and to consist of brass and bronze solids and turnings, and alloyed and contaminated copper scrap. Shall be free of insulated wire, grindings, electrotype shells and non-metallics. Hydraulically briquetted material subject to agreement.	Enerv	RED BRASS COMPOSITION TURNINGS Shall consist of turnings from red brass composition material and should be sold subject to sample or analysis.
Drove	COPPER-BEARING SCRAP Shall consist of miscellaneous copper-containing skimmings, grindings, ashes, iron brass and copper, residues and slags. Shall be free of insulated wires; copper chlorides; unprepared tangled material; large motors; pyrophoric material; asbestos brake linings; furnace bottoms; high lead materials; graphite crucibles; and noxious and explosive materials. Fine powdered material by agreement. Hydraulically briquetted material subject to agreement.	Engel	MACHINERY OR HARD BRASS SOLIDS Shall have a copper content of not less than 75%, a tin content of not less than 6%, and a lead content of not less than 6% nor more than 11%, and total impurities, exclusive of zinc, antimony, and nickel of not more than 0.75%; the antimony content not to exceed 0.50%. Shall be free of lined and unlined standard red car boxes.
Druid	INSULATED COPPER WIRE SCRAP Shall consist of copper wire scrap with various types of insulation. To be sold on a sample or recovery basis, subject to agreement between buyer and seller.	Erin	MACHINERY OR HARD BRASS BORINGS Shall have a copper content of not less than 75%, a tin content of not less than 6%, and a lead content of not less than 6% nor more than 11%, and the total impurities, exclusive of zinc, antimony, and nickel of not more than 0.75%; the antimony content not to exceed 0.50%.
Ebony	COMPOSITION OR RED BRASS Shall consist of red brass scrap, valves, machinery bearings and other machinery parts, including miscellaneous castings made of copper, tin, zinc, and/or lead. Shall be free of semi-red brass castings (78% to 81% copper); railroad car boxes and other similar high-lead alloys; cocks and faucets; closed water meters; gates; pot pieces; ingots and burned brass; aluminum, silicon, and manganese bronzes; iron and non-metallics. No piece to measure more than 12" over any one part or weigh over 100 lbs.	Fence	UNLINED STANDARD RED CAR BOXES (CLEAN JOURNALS) Shall consist of standard unlined and/or sweated railroad boxes and unlined and/or sweated car journal bearings, free of yellow boxes and iron-backed boxes.
		Ferry	LINED STANDARD RED CAR BOXES (LINED JOURNALS) Shall consist of standard babbitt-lined railroad boxes and/or babbitt-lined car journal bearings, free of yellow boxes and iron-backed boxes.
		Grape	COCKS AND FAUCETS Shall consist of mixed clean red and yellow brass, including chrome or nickel-plated, free of gas cocks, beer faucets, and aluminum and zinc base die cast material, and to contain a minimum of 35% semi-red.
		Honey	YELLOW BRASS SCRAP Shall consist of mixed yellow brass solids, including brass castings, rolled brass, rod brass, tubing and miscellaneous yellow brasses, including plated brass. Must be free of manganese-bronze, aluminum-bronze, unsweated radiators or radiator parts, iron, and excessively dirty and corroded materials. Must also be free of any type of munitions including, but not limited to, bullet casings.
		Ivory	YELLOW BRASS CASTINGS Shall consist of yellow brass castings in crucible shape, no piece to measure more than 12 inches over any one part; and shall be free of brass forgings, silicon bronze, aluminum bronze and manganese bronze, and not to contain more than 15% nickel plated material.

CODE	ITEM
	a minimum thickness of 0.015 inches (.38 mm) and to be free of 2000 and 7000 series, hair wire, wire screen, punchings less 1/2 inch (1.25 cm) diameter, dirt, and other non-metallic items. Grease and oil not to total more than 1%. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.
Taint/ Tabor	CLEAN MIXED OLD ALLOY SHEET ALUMINUM Shall consist of clean old alloy aluminum sheet of two or more alloys, free of foil, venetian blinds, castings, hair wire, screen wire, food or beverage containers, radiator shells, airplane sheet, bottle caps, plastic, dirt, and other non-metallic items. Oil and grease not to total more than 1%. Up to 10% Taint permitted.
Take	NEW ALUMINUM CAN STOCK Shall consist of new low copper aluminum can stock and clippings, clean, lithographed or not lithographed, and coated with clear lacquer but free of lids with sealers, iron, dirt and other foreign contamination. Oil not to exceed 1%.
Talc	POST-CONSUMER ALUMINUM CAN SCRAP Shall consist of old aluminum food and/or beverage cans. The material is to be free of other scrap metals, foil, tin cans, plastic bottles, paper, glass, and other non-metallic items. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.
Talcred	SHREDDED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP Shall have a density of 12 to 17 pounds per cubic foot (193 to 273 kg/m ³). Material should contain maximum 5% fines less than 4 mesh (U.S. standard screen size) (6.35 mm). Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastics, glass, wood, dirt, grease, trash, and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage cans, are not acceptable. Variations to this specification should be agreed upon prior to shipment between the seller and buyer.
Taldack	DENSIFIED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP Shall have a biscuit density of 35 to 50 pounds per cubic foot (562 to 802 kg/m ³). Each biscuit not to exceed 60 pounds (27.2 kg). Nominal biscuit size range from 10" to 13" x 10 1/4" (25.4 x 33 x 26 cm) to 20" x 6 1/4" x 9" (50.8 x 15.9 x 22.9 cm). Shall have banding slots in both directions to facilitate bundle banding. All biscuits comprising a bundle must be of uniform size. Size: Bundle range dimensions acceptable are 41" to 44" x 51" (104 to 112 cm) to 54" x 54" (137 x 137 cm) to 56" (142 cm) high. The only acceptable tying method shall be as follows: Using minimum 5/8" (1.6 cm) wide by .020" (.05 cm) thick steel straps, the bundles are to be banded with one vertical band per row and a minimum of two girth (horizontal) bands per bundle. Use of skids and/or support sheets of any material is not acceptable. Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastic, glass, wood, dirt, grease, trash, and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage

CODE	ITEM
	cans, are not acceptable. Items not covered in the specifications, including moisture, and any variations to this specification should be agreed upon prior to shipment between the seller and buyer.
Taldon	BALED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP Shall have a minimum density of 14 pounds per cubic foot (225 kg/m ³), and a maximum density of 17 pounds per cubic foot (273 kg/m ³) for unflattened UBC and 22 pounds per cubic foot (353 kg/m ³) for flattened UBC. Size: Minimum 30 cubic feet (.85 m ³), with bale range dimensions of 24" to 40" (61 to 132 cm) by 30" to 52" (76 to 132 cm) by 40" to 84" (102 to 213 cm). The only acceptable tying method shall be as follows: four to six 5/8" (1.6 cm) x .020" (5 mm) steel bands, or six to ten #13 gauge steel wires (aluminum bands or wires are acceptable in equivalent strength and number). Use of skids and/or support sheets of any material is not acceptable. Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastic, glass, wood, dirt, grease, trash, and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage cans, are not acceptable. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.
Taldork	BRIQUETUED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP Shall have a briquette density of 50 pounds per cubic foot (800 kg/m ³) minimum. Nominal briquette size shall range from 12" to 24" (30.5 x 61 cm) x 12" to 24" (30.5 x 61 cm) in uniform profile with a variable length of 8" (20.3 cm) minimum and 48" (122 cm) maximum. Briquettes shall be bundled or stacked on skids and secured with a minimum of one vertical band per row and a minimum of one girth band per horizontal layer. Briquettes not to overhang pallet. Total package height shall be 48 (122 cm) maximum. Banding shall be at least 5/8" (1.6 cm) wide by .020" (5 mm) thick steel strapping or equivalent strength. The weight of any bundle shall not exceed 4,000 pounds (1,814 mt). Material must be magnetically separated and free of steel, plastic, glass, dirt and all other foreign substances. Any and all aluminum items other than UBC are unacceptable. Any free lead is basis for rejection. Items not covered in the specification, including moisture, and any variations to this specification should be agreed upon prior to shipment between the buyer and seller.
Tale	PAINTED SIDING Shall consist of clean, low copper aluminum siding scrap, painted one or two sides, free of plastic coating, iron, dirt, corrosion, fiber, foam, or fiberglass backing or other non-metallic items.
Talk	ALUMINUM COPPER RADIATORS Shall consist of clean aluminum and copper radiators, and/or aluminum fins on copper tubing, free of brass tubing, iron and other foreign contamination.
Tall	E.C. ALUMINUM NODULES Shall consist of clean E.C. aluminum, chopped or shredded, free of screening, hair-wire, iron, copper, insulation and other non-metallic items. Must be free of minus 20 mesh material. Must contain 99.45% aluminum content.

CODE	ITEM	CODE	ITEM
Tally	ALL ALUMINUM RADIATORS FROM AUTOMOBILES Shall consist of clean aluminum radiators and/or condensers. Should be free of all other types of radiators. All contaminants including iron, plastic, and foam not to exceed 1% of weight. Any deviation to this specification, including oxidation and aluminum content, to be negotiated between buyer and seller.	Tense	MIXED ALUMINUM CASTINGS Shall consist of all clean aluminum castings which may contain auto and airplane castings but no ingots, and to be free of iron, brass, dirt and other non-metallic items. Oil and grease not to total more than 2%.
Talon	NEW PURE ALUMINUM WIRE AND CABLE Shall consist of new, clean, unalloyed aluminum wire or cable free from hair wire, ACSR, wire screen, iron, insulation and other non-metallic items.	Tepid	AIRCRAFT SHEET ALUMINUM Should be sold on recovery basis or by special arrangements with purchaser.
Tann	NEW MIXED ALUMINUM WIRE AND CABLE Shall consist of new, clean, unalloyed aluminum wire or cable which may contain up to 10% 6000 series wire and cable free from hair wire, wire screen, iron, insulation and other non-metallic items.	Terse	NEW ALUMINUM FOIL Shall consist of clean, new, pure, uncoated 1000 and/or 3000 and/or 8000 series alloy aluminum foil, free from anodized foil, radar foil and chaff, paper, plastics, or any other non-metallic items. Hydraulically briquetted material and other alloys by agreement between buyer and seller.
Tarry A	CLEAN ALUMINUM PISTONS Shall consist of clean aluminum pistons to be free from struts, bushings, shafts, iron rings and non-metallic items. Oil and grease not to exceed 2%.	Tesla	POST CONSUMER ALUMINUM FOIL Shall consist of baled old household aluminum foil and formed foil containers of uncoated 1000, 3000 and 8000 series aluminum alloy. Material may be anodized and contain a maximum of 5% organic residue. Material must be free from radar chaff foil, chemically etched foil, laminated foils, iron, paper, plastic and other non-metallic contaminants.
Tarry B	CLEAN ALUMINUM PISTONS WITH STRUTS Shall consist of clean whole aluminum pistons with struts. Material is to be free from bushings, shafts, iron and non-metallic items. Oil and grease not to exceed 2%.	Tetra	NEW COATED ALUMINUM FOIL Shall consist of new aluminum foil coated or laminated with ink, lacquers, paper, or plastic. Material shall be clean, dry, free of loose plastic, PVC and other non-metallic items. This foil is sold on a metal content basis or by sample as agreed between buyer and seller.
Tarry C	IRONY ALUMINUM PISTONS Shall consist of aluminum pistons with non-aluminum attachments to be sold on a recovery basis or by special arrangement between buyer and seller.	Thigh	ALUMINUM GRINDINGS Should be sold on recovery basis or by special arrangements with purchaser.
Tassel	OLD MIXED ALUMINUM WIRE AND CABLE Shall consist of old, unalloyed aluminum wire and cable which may contain up to 10% 6000 series wire and cable with not over 1% free oxide or dirt and free from hair wire, wire screen, iron, insulation and other non-metallic items.	Thirl	ALUMINUM DROSSES, SPATTERS, SPILLINGS, SKIMMINGS AND SWEEPINGS Should be sold on recovery basis or by special arrangements with purchaser.
Taste	OLD PURE ALUMINUM WIRE AND CABLE Shall consist of old, unalloyed aluminum wire and cable containing not over 1% free oxide or dirt and free from hair wire, wire screen, iron, insulation and other non-metallic items.	Throb	SWEATED ALUMINUM Shall consist of aluminum scrap which has been sweated or melted into a form or shape such as an ingot, sow or slab for convenience in shipping; to be free from corrosion, dross or any non-aluminum inclusions. Should be sold subject to sample or analysis.
Teens	SEGREGATED ALUMINUM BORINGS AND TURNINGS Shall consist of aluminum borings and turnings of one specified alloy. Material should be free of oxidation, dirt, free iron, stainless steel, magnesium, oil, flammable liquids, moisture and other non-metallic items. Fines should not exceed 3% through a 20 mesh (U.S. standard) screen.	Tooth	SEGREGATED NEW ALUMINUM ALLOY CLIPPINGS AND SOLIDS Shall consist of new, clean, uncoated and unpainted aluminum scrap of one specified aluminum alloy with a minimum thickness of .015" (.38 mm) and to be free of hair wire, wire screen, dirt and other non-metallic items. Oil and grease not to total more than 1%. Also free from punchings less than 1/2" (1.27 cm) in size.
Telic	MIXED ALUMINUM BORINGS AND TURNINGS Shall consist of clean, uncorroded aluminum borings and turnings of two or more alloys and subject to deductions for fines in excess of 3% through a 20 mesh screen and dirt, free iron, oil, moisture and all other non-metallic items. Material containing iron in excess of 10% and/or free magnesium or stainless steel or containing highly flammable cutting compounds will not constitute good delivery. To avoid dispute, material should be sold on basis of definite maximum zinc, tin and magnesium content.	Tough	MIXED NEW ALUMINUM ALLOY CLIPPINGS AND SOLIDS Shall consist of new, clean, uncoated and unpainted aluminum scrap of two or more alloys with a minimum thickness of .015" (.38 mm) and to be free of hair wire, wire screen, dirt and other non-metallic items. Oil and grease not to total more than 1%. Also free from punchings less than 1/2" (1.27 cm) in size.

CODE	ITEM
Tread	SEGREGATED NEW ALUMINUM CASTINGS, FORGINGS AND EXTRUSIONS Shall consist of new, clean, uncoated aluminum castings, forgings, and extrusions of one specified alloy only and to be free from sawings, stainless steel, zinc, iron, dirt, oil, grease and other non-metallic items.
Troma	Aluminum Auto or Truck Wheels Shall consist of clean, single-piece, unplated aluminum wheels of a single specified alloy, free of all inserts, steel, wheel weights, valve stems, tires, grease and oil and other non-metallic items. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.
Trump	ALUMINUM AUTO CASTINGS Shall consist of all clean automobile aluminum castings of sufficient size to be readily identified and to be free from iron, dirt, brass, bushings, and non-metallic items. Oil and grease not to total more than 2%.
Twang	INSULATED ALUMINUM WIRE SCRAP Shall consist of aluminum wire scrap with various types of insulation. To be sold on a sample or recovery basis, subject to arrangement between buyer and seller.
Tweak	FRAGMENTIZER ALUMINUM SCRAP (from Automobile Shredders) Derived from either mechanical or hand separation, the material must be dry and not contain more than 4% maximum free zinc, 1% maximum free magnesium, and 1.5% maximum of analytical iron. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, air bag canisters, or any sealed or pressurized items. Any variation to be sold by special arrangement between buyer and seller.
Twire	BURNT FRAGMENTIZER ALUMINUM SCRAP (from Automobile Shredders) Incinerated or burned material must be dry and not contain more than X% (% to be agreed upon by buyer and seller) ash from incineration, 4% maximum free zinc, 1% maximum free magnesium, and 1.5% maximum of analytical iron. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, air bag canisters, or any sealed pressurized items. Any variation to be sold by special arrangement between buyer and seller.
Twist	ALUMINUM AIRPLANE CASTINGS Shall consist of clean aluminum castings from airplanes and to be free from iron, dirt, brass, bushings, and non-metallic items. Oil and grease not to total more than 2%.
Twitch	FLOATED FRAGMENTIZER ALUMINUM SCRAP (from Automobile Shredders) Derived from wet or dry media separation device, the material must be dry and not contain more than 1% maximum free zinc, 1% maximum free magnesium, and 1% maximum of analytical iron. Not to contain more than a total 2% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, air bag canisters, or any sealed or pressurized items. Any variation to be sold by special arrangement between buyer and seller.

CODE	ITEM
ZINC	
Saves	OLD ZINC DIE CAST SCRAP Shall consist of miscellaneous old zinc base die castings, with or without iron and other foreign attachments. Must be free of borings, turnings, dross pieces, chunks, melted pieces and skimmings. All unmeltables, dirt, foreign attachments, and volatile substances (such as rubber, cork, plastic, grease, etc.) are deductible. Material containing in excess of 30% iron will not constitute good delivery.
Scabs	NEW ZINC DIE CAST SCRAP Shall consist of new or unused, clean, zinc base die castings. Castings to be unplated, unpainted, and free from corrosion.
Scoot	ZINC DIE CAST AUTOMOTIVE GRILLES Shall consist of clean, old or used zinc base die cast automotive grilles, free from soldered material. All foreign attachments and extraneous materials are deductible.
Scope	NEW PLATED ZINC DIE CAST SCRAP Shall consist of new or unused clean, plated zinc base die castings, free from corrosion.
Score	OLD SCRAP ZINC Shall consist of clean dry scrap zinc, such as sheets, jar lids, clean unalloyed castings and anti-corrosion plates. Borings and turnings are not acceptable. Material must not be excessively corroded or oxidized. All foreign attachments and extraneous materials are deductible.
Screen	NEW ZINC CLIPPINGS Shall consist of any new pure zinc sheets or stampings free from corrosion. To contain no foreign material or attachments. Printers zinc, such as engravers zinc, lithograph sheets and addressograph plates subject to special arrangements. Printers zinc to be free of routings.
Scribe	CRUSHED CLEAN SORTED FRAGMENTIZERS DIE CAST SCRAP, AS PRODUCED FROM AUTOMOBILE FRAGMENTIZERS To be clean, free of dirt, oil, glass, rubber, and trash. To contain a maximum of 5% unmeltables such as free iron, copper, aluminum and other metals.
Scroll	UNSORTED ZINC DIE CAST SCRAP Produced from automobile fragmentizers. Material to contain about 55% zinc-bearing scrap. Other nonferrous metals such as aluminum, stainless steel, red metal, etc., to be about 40%. Insulated copper wire about 1%. Trash, dirt, glass, rubber, oil, iron, not to exceed 5%. Any variations to be sold by special arrangement between buyer and seller.
Scrub	HOT DIP GALVANIZERS SLAB ZINC DROSS (Batch Process) Shall consist only of galvanizers unsweated zinc dross in slab form from hot dip galvanizing (Batch Process) with a minimum zinc content of 92% and shall be free of skimmings and tramp iron. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment. Slabs shall not weigh over 100 pounds each. Heavier pieces acceptable upon mutual agreement between buyer and seller. Material from continuous galvanizing operation is not acceptable. Blocks are acceptable upon mutual agreement.

CODE	ITEM
Scull	ZINC DIE CAST SLABS OR PIGS Shall consist of melted zinc base die cast materials, in smooth clean solid slabs or pigs. Material to be free from drosses and to contain a minimum zinc content of 90%. To contain a maximum of 0.1% nickel and maximum of 1% lead. Blocks are acceptable upon mutual agreement.
Seal	CONTINUOUS LINE GALVANIZING SLAB ZINC TOP DROSS Shall consist of unsweated zinc dross removed from the top of a continuous line galvanizing bath, in slab form not weighing in excess of 100 pounds each, with a minimum zinc content of 90%. Heavier pieces acceptable upon mutual agreement between buyer and seller. Shall be free of skimmings. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment.
Seam	CONTINUOUS LINE GALVANIZING SLAB ZINC BOTTOM DROSS Shall consist of unsweated zinc dross removed from the bottom of a continuous line galvanizing bath, in slab form not weighing in excess of 100 pounds each, with a minimum zinc content of 92%. Heavier pieces acceptable upon mutual agreement between buyer and seller. Shall be free of skimmings. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment.
Shelf	PRIME ZINC DIE CAST DROSS Shall consist of metal skimmed from the top of pot of molten zinc die cast metal. Must be unsweated, unfluxed, shiny, smooth, metallic and free from corrosion or oxidation. Should be poured in molds or in small mounds weighing not over 75 pounds each. Zinc content shall be minimum of 85%.

MAGNESIUM

Wafer	MAGNESIUM CLIPS Shall consist of clean magnesium clips in crucible size, free of copper, aluminum, and zinc flashings and excessive oil and grease. To be free of all foreign attachments.
Walnut	MAGNESIUM SCRAP Shall consist of magnesium castings, magnesium engine blocks and transmission casings, bomber and car wheels, extrusions, and sheet. Material to be free from brass and copper inserts and all foreign attachments. To be free of anodes, hollow castings and explosives. Percentages of and penalties for dirt, oil, grease, and iron to be subject to agreement between buyer and seller. Excessively large pieces to be negotiated between buyer and seller.
Wine	MAGNESIUM ENGRAVER PLATES To be free of copper, aluminum, zinc, and electrolyte plates. To be clean and free of all foreign attachments. Magnesium plates shipped loose by agreement between buyer and seller.
Wood	MAGNESIUM DOCKBOARDS Shall consist of clean magnesium dockboard cut or broken to size agreed upon by buyer and seller. To be free of all foreign attachments.

CODE	ITEM
World	MAGNESIUM TURNINGS It is recommended that these materials be sold by special arrangement between buyer and seller.

LEAD

Racks	SCRAP LEAD-SOFT Shall consist of clean soft scrap lead, free of other materials such as drosses, battery plates, lead covered cable, hard lead, collapsible tubes, foil, type metals, aluminum, zinc, iron and brass fittings, dirty chemical lead and radioactive materials. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Radio	MIXED HARD/SOFT SCRAP LEAD Shall consist of clean lead solids, free of other materials, such as drosses, battery plates, lead covered cable, collapsible tubes, type metals, aluminum, zinc, iron and brass fittings, dirty chemical lead and radioactive materials. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Rails	LEAD BATTERY PLATES Specify whether automotive, industrial or mixed. Also whether they are groups or loose. The only other metallic that might be included could be lead connectors. To be free of non-metallics, i.e., plastic or rubber, with the exception that separators may be included. Material to be dry. May be bought on an assay basis or a flat price. Submarine plates subject to negotiation. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Rains	SCRAP DRAINED/DRY WHOLE INTACT LEAD To be free of any liquid. Cases to be either plastic or rubber and be complete including caps. Non-lead (nicad, ni-fe, carbonaire, etc.) not acceptable. Industrial, steel cased, aircraft (aluminum cased) and partial, cracked or broken batteries and batteries without caps subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Rakes	BATTERY LUGS To be free of scrap lead, wheel weights, battery plates, rubber and/or plastic case material and other foreign material. A minimum of 97% metallic content is required. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Relay	LEAD COVERED COPPER CABLE Free of armored covered cable, and foreign material.
Rents	LEAD DROSS Should be clean and reasonably free of other materials such as iron, dirt, harmful chemicals or other metals. To be free of radioactive materials, aluminum and zinc. May be bought on an assay basis or as agreed to by buyer and seller. Other metals present such as antimony, tin, etc., to be accounted for as agreed between buyer and seller. Material to be readily dumped from drums. An extra charge may be assessed if material has to be mechanically removed. Review packaging specification and regulatory status pertaining to shipping with buyer prior to sale.

CODE	ITEM
Rink	SCRAP WET WHOLE INTACT LEAD BATTERIES Consisting of SLI (starting, lighting & ignition), automotive, truck, 8-D and commercial golf cart and marine-type batteries. Cases to be either plastic or rubber and to be complete. Non-lead (i.e., ni-cad, ni-fe, carbonaire, etc.) not acceptable. Other types i.e. aircraft (aluminum) gel-cel, lawnmower, etc., and partial, cracked or broken batteries or batteries without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Rono	SCRAP INDUSTRIAL INTACT LEAD CELLS Consisting of plates enclosed by some form of complete plastic case. Partial, cracked or broken cells, cells without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Roper	SCRAP WHOLE INTACT INDUSTRIAL LEAD BATTERIES Consisting of bus, diesel, locomotive, telephone and/or steel cased batteries. Submarine batteries subject to negotiation. Partial, cracked, broken batteries or batteries without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
Ropes	WHEEL WEIGHTS To consist of lead tire balances with or without iron clips. Not to include scrap lead, lugs or plates unless specifically agreed to. To be free of foreign material. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

NICKEL/STAINLESS/INTEMP

Aroma	NEW NICKEL SCRAP Shall consist of clean new sheet, plate, bar, tube, and any other wrought nickel scrap solids. Nickel minimum 99%; Cobalt maximum 0.25%; Copper maximum 0.50%. Free of castings, as well as any foreign attachments or other contamination.
Burly	OLD NICKEL SCRAP Shall consist of old and/or new sheet, plate, bar, tube, and any other wrought nickel scrap solids. Material to contain a minimum of 98% nickel; Copper maximum 0.50%. This grade to be free of castings, soldered, brazed, sweated, or painted material, other metallic coating, foreign attachments, or any other contamination.
Dandy	NEW CUPRO NICKEL CLIPS AND SOLIDS Shall consist of clean, new, segregated (normally accepted analysis grades) either 70/30, 80/20, or 90/10 cupro nickel tube, pipe, sheet, plate, or other wrought solid forms. Must be free of foreign attachments or any other contamination.

CODE	ITEM
Daunt	CUPRO NICKEL SOLIDS Shall consist of old, and/or new, segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel tube, pipe, sheet, plate, or other wrought solid forms. Maximum 2% sediment allowable. Any other forms of cupro nickel solids such as castings, gates, risers, spills, etc., packaged separately, may or may not be included, only upon agreement between buyer and seller. Must be free of foreign attachments and all other contamination. Other particulars concerning physical description, analysis and packaging to be agreed upon between buyer and seller.
Decoy	CUPRO NICKEL SPINNINGS, TURNINGS, BORINGS Shall consist of clean, segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel spinnings, turnings, or borings. Particulars concerning physical description, analysis, and packaging, to be agreed upon between buyer and seller.
Delta	SOLDERED CUPRO NICKEL SOLIDS Shall consist of segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel solids, soldered, brazed, or sweated material. Must be free of trimmed seams and edges and all other contamination.
Depth	MISCELLANEOUS NICKEL-COPPER AND NICKEL-COPPER IRON Shall consist of miscellaneous scrap in which the basic elements, by weight, are nickel and copper, such as copper nickel peelings, plating racks, and hangers, and all nickel and copper in attached or combined form. In all cases, miscellaneous nickel copper scrap should be sold by description and analysis.
Hitch	NEW R-MONEL CLIPPINGS AND SOLIDS Shall consist of clean, new, R-Monel sheet, plate, bar, rod, tube, pipe, or any other wrought scrap. Must be free of any foreign attachments or all other contamination.
House	NEW MIXED MONEL SOLIDS AND CLIPPINGS Shall consist of new, clean R and K-Monel solids and clippings. Free of cast material, foreign attachments and all other contamination.
Ideal	OLD MONEL SHEET AND SOLIDS Shall consist of clean R and K-Monel solids such as sheet, plate, pipe, rods, forgings, screen and wire cloth. Must be free of soldered, brazed, welded, or sweated material, cast material, foreign attachments, and all other contamination.
Indian	K-MONEL SOLIDS Shall consist of clean K-Monel solids.
Junto	SOLDERED MONEL SHEET AND SOLIDS Shall consist of soldered and/or brazed miscellaneous grades of Monel alloys in either wrought or cast form. Must be free of trimmed seams and edges, non-metallic filling, foreign attachments, and all other contamination. Particulars concerning physical description, assay, and packaging to be agreed upon between buyer and seller.

CODE	ITEM
Lemon	MONEL CASTINGS Shall consist of various types of clean Monel castings, assaying minimum 60% nickel. Must be free of foreign attachments or any other contamination.
Lemur	MONEL TURNINGS Shall consist of mixed Monel turnings and borings containing a minimum of 60% nickel content, on a dry basis.
Pekoe	200 SERIES STAINLESS STEEL SCRAP SOLIDS Shall consist of all types of clean AISI Series Stainless Steel Scrap Solids, which contain a maximum of .5% copper, free of foreign attachments and other contamination.
Sabot	STAINLESS STEEL SCRAP Shall consist of clean 18-8 type stainless steel clips and solids containing a minimum 7% nickel, 16% chrome, and have a maximum of .50% molybdenum, .50% copper, .045% phosphorous, and .03% sulfur, and otherwise free of harmful contaminants. Particulars concerning physical description, grading, additional analysis, and preparation to be agreed upon between buyer and seller.
Ultra	STAINLESS STEEL TURNINGS Shall consist of clean 18-8 type stainless steel turnings containing a minimum 7% nickel and 16% chrome, and to be free of nonferrous metals, nonmetallics, excessive iron, oil and other contaminants. Particulars concerning physical description, assay, and packaging to be agreed upon between buyer and seller.
Vaunt	EDISON BATTERIES Nickel-iron batteries to be sold free of crates, copper terminal connectors, and excess liquid. Must be free of nickel cadmium batteries.

MIXED METALS

Elmo	MIXED ELECTRIC MOTORS Shall consist of whole electric motors and/or dismantled electric motor parts that are primarily copper-wound. May contain aluminum-wound material, subject to agreement between buyer and seller. No excessive steel attachments such as gear reducers, iron bases, and pumps, or loose free iron allowed. Specification not to include sealed units or cast iron compressors.
Shelmo	SHREDDED ELECTRIC MOTORS (also called "shredder pickings" or "meatballs") Shall consist of mixed copper-bearing material from ferrous shredding, comprised of motors without cases. May contain aluminum-wound material and insulated copper harness wire, subject to agreement between buyer and seller. Trace percentages of other contaminants and fines may be present. No free iron or sealed units.
Zebra	(High Density) Shall consist of high-density nonferrous metals produced by media separation technology containing brass, copper, zinc, nonmagnetic stainless steel, and copper wire. Material to be dry and free from excess oxidation. The percentage and types of metals other than these, as well as the percentage and types of non-metallic contamination, are to be agreed upon between the buyer and seller.

CODE ITEM

Zeppelin (Light Density)	Shall consist of light-density nonferrous metals produced by media separation technology and contain thin-gauge aluminum and magnesium. Material to be dry and free from excess oxidation. The percentage and types of metals other than aluminum and magnesium, as well as the percentage and types of nonmetallic contamination, are to be agreed upon between the buyer and seller.
Zorba	FRAGMENTIZER NONFERROUS MIXED METAL SCRAP (from Automobile Shredders) Shall be made up of a combination of the nonferrous metals: aluminum, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each of these metals within the nonferrous concentrate may be subject to agreement between buyer and seller, may vary from shredder to shredder and may, in some cases, be zero for a particular metal. Shall be obtained by eddy current, air separation, flotation, screening, other segregation technique(s) or a combination thereof. Shall have passed one or more magnets to reduce or eliminate free iron and/or large iron attachments. Shall be free of radioactive material, dross or ash. May be screened to permit description by specific size ranges. May contain high density non-metallics. Items of exclusion, inclusion or limitation not set out in the above specifications, such as moisture and free iron and/or attachments or the presence or absence of other metals, are subject to agreement between buyer and seller. Material to be bought/sold under this guideline shall be identified as Zorba with a number to follow indicating the estimated percentage nonferrous metal content of the material (e.g., Zorba 90—means the material contains approximately 90% nonferrous metal content).

OTHER

Ranch	BLOCK TIN Block tin must assay minimum of 98% tin, and to be free of liquids, solder, and brass connections, pewter, pumps, pot pieces, and dirt.
Ranks	PEWTER Shall consist of tableware and soda-fountain boxes but should contain a minimum of 84% tin. Siphon tops to be accounted for separately. Material must be free of brass, zinc, and other foreign metals.
Raves	HIGH TIN BASE BABBITT Shall contain a minimum of 78% tin and be free of brassy or zincy metals.
Roses	MIXED COMMON BABBITT Shall consist of lead base bearing metal containing not less than 8% tin, free from Allens metal, ornamental, antimonial and type metal. Must be free from all zinc and excessive copper in the alloy.

Identification Checklist for Precious Metals

This Identification Check List for Precious Metals sets up a general basis for identifying types and grades of precious metals scrap by the scrap processor who will be familiar both to the precious metals refiner and to the plants generating precious metals scrap.

By checking this identification list, the scrap processor gives the refiner a fairly accurate conception of the material the processor has on hand and offers a basis for the refiner to quote an estimated price for the material.

Due to the high values and the constantly changing character of precious metal scrap, it is often the practice in the industry to require a sample to be submitted before giving refining schedules.

I. Scrap Sources

REFINED SILVER METAL – 99.9 MIN. PERCENT

Silver-bearing materials:

Anodes
Assemblies—Electrical
Batteries
 Silver/Copper Plated
 Silver/Cadmium
 Silver/Zinc Silver/Magnesium
Blanking Scrap—Punchings
Brazing Alloys
Brushes—Electric Motors
Bullion
Chemical Salts
Clad Bi-Metal Parts
Coin Silver
Contacts
Dental Amalgam
Films
 Industrial X-Ray
 Medical X-Ray
 Lithographic
 Photographic Negatives
Filters—Plating
Flake—From Hypo Solution Recovery Systems
Hooks—Plating—Nodules
Jewelry Sweeps
Paints—Paste
Paper—Reproduction
Plated Parts—Electrical—Electronic
Plated Serving Pieces

Plated Utensils
Plated Wire
Powders—Granulated
Punchouts
Relays—Electrical
Resins
Silver Lined Bearings—Diesel Locomotives and Aircraft
Sludges—Plating and Precipitates
Solutions—Plating
Sterling Silver
Tin Lead Alloys—Contaminated
Turnings
Wave Guides
Wiping Rags

REFINED GOLD METAL – 99.5 MIN. PERCENT

REFINED GOLD SPONGE – 99.5 MIN. PERCENT

Gold-bearing materials:

Brazing Alloys
Clad Metal Parts
Contacts
Dental Alloys
Dental Scrap
Dental Sweeps and Grindings
Diodes
Filled Scrap
Filters—Plating
Flakes
Flashings
Foil
Hooks—Plating—Nodules
Jewelry Scrap
Jewelry Sweeps and Grindings
Paints and Paste
Peelings
Placer Gold
Plated Parts—Electrical
Plated Wire
Powders
Printed Circuit Boards
Printed Circuit Boards with Components
Punchouts
Resins—Plating
Salts—Chemical
Sludges—Plating
Solutions
Sponge
Tin Lead Alloys—Contaminated
Transistors
Wiping Rags
Wire

**REFINED PALLADIUM METAL—99.9 MIN. PERCENT
REFINED PALLADIUM SPONGE—99.9 MIN.**

Palladium-bearing materials:

Catalysts
Chemical Salts
Clad Materials
Contact Points
Dental Alloys
Dental Scraps
Dental Sweeps
Jewelry Scrap (Sweeps)
Paste
Plated Parts
Powders
Relays—Electrical
Sludges
Solutions
Wire

**REFINED PLATINUM METAL—99.9 MIN. PERCENT
REFINED PALLADIUM SPONGE—99.9 MIN. PERCENT**

Platinum-bearing materials:

Catalysts
Chemicals
Clad Materials
Contacts
Dental Alloys
Dental Scrap
Dental Sweeps, Grindings
Jewelry Scrap
Jewelry Sweeps
Laboratory Ware
Magneto Points
Powders and Paste
Solutions—Plating
Spark Plugs—Aircraft
Thermocouple Wire

*Scrap containing combinations of precious metals
(gold, silver, platinum and palladium):*

Assemblies—Components
Bullion
Carbon
Catalysts
Chemicals
Chips
Drillings
Electronic Scrap
High Temperature Resistant Alloys
Paints
Paste
Powders
Relays—Electrical
Resins
Ribbons
Rings
Salts
Solutions
Sweeps
Telephone Switching Scrap
Thick Film
Wire

II. SCRAP CATEGORIES

A. Solution

1. Acid
2. Basic
3. Matrix if known

B. Resin

C. Sludges

D. Burnable Material

1. Carbon
2. Filters
3. Film
4. Papers
5. Unprepared Sweeps
6. Others

E. Sweeps (Prepared)

F. Printed Circuit Board

1. Punch Outs
2. Non Assembled
3. Assembled

G. Glass to Metal Tubes, etc.

1. Solid Precious Metal Parts
2. Alloyed Metal Parts
3. Plated Metal Parts
4. Ceramics
5. Thick Film
6. Other...

H. Metal Scrap

I. Non-Magnetic

1. Impure Gold
2. Impure Silver
3. Copper Base
4. Aluminum Base
5. Brass Base
6. Bronze Base
7. Molybdenum Base
8. Beryllium Base
9. Lead Base
10. Tin Base
11. Other...

II. Magnetic

1. Kovar Base
2. Stainless Steel Base
3. Iron Base
4. Nickel Base
5. Other...

I. Catalyst

1. Carbon
2. Alumina
3. Rare Earth
4. Silica
5. Other...

Guidelines for Ferrous Scrap: FS-2006

CODE ITEM

General Information

a. Cleanness. All grades shall be free of dirt, nonferrous metals, or foreign material of any kind, and excessive rust and corrosion. However, the terms "free of dirt, nonferrous metals, or foreign material of any kind" are not intended to preclude the accidental inclusion of negligible amounts where it can be shown that this amount is unavoidable in the customary preparation and handling of the particular grade involved.

b. Off-grade material. The inclusion in a shipment of a particular grade of iron and steel scrap of a negligible amount of metallic material which exceeds to a minor extent the applicable size limitations, or which fails to a minor extent to meet the applicable requirements as to quality or kind of material, shall not change the classification of the shipment, provided it can be shown that the inclusion of such off-grade material is unavoidable in the customary preparation and handling of the grade involved.

c. Residual alloys. Wherever the term "free of alloys" is used in the classifications given herein, it shall mean that any alloys contained in the steel are residual and have not been added for the purpose of making an alloy steel. Steel scraps shall be considered free of alloys when the residual alloying elements do not exceed the following percentages:

Nickel	.45%	Molybdenum	.10%
Chromium	.20%	Manganese	1.65%

The combined residuals other than manganese shall not exceed a total of 0.60 percent.

d. Deviations. Any deviations from the general classifications of iron and steel scrap may be consummated by mutual agreement between buyer and seller.

- 200 No. 1 heavy melting steel.**
Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 24 inches (charging box size) prepared in a manner to insure compact charging.
- 201 No. 1 heavy melting steel 3 feet x 18 inches.**
Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 36 x 18 inches (charging box size) prepared in a manner to insure compact charging.
- 202 No. 1 heavy melting steel 5 feet x 18 inches.**
Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 18 inches (charging box size) prepared in a manner to insure compact charging.
- 203 No. 2 heavy melting steel.***
Wrought iron and steel scrap, black and galvanized, 1/8 inch and over in thickness, charging box size to include material not suitable as No. 1 heavy melting steel. Prepared in a manner to insure compact charging.

CODE ITEM

- 204 No. 2 heavy melting steel.***
Wrought iron and steel scrap, black and galvanized, maximum size 36 x 18 inches. May include all automobile scrap properly prepared.
- 205 No. 2 heavy melting steel 3 feet x 18 inches.**
Wrought iron and steel scrap, black and galvanized, maximum size 36 x 18 inches. May include automobile scrap, properly prepared; however, to be free of sheet iron or thin gauged material.
- 206 No. 2 heavy melting steel 5 feet x 18 inches.**
Wrought iron and steel scrap, black and galvanized, maximum size 60 x 18 inches. May include automobile scrap, properly prepared; however, to be free of sheet iron or thin gauged material.
- 207 No. 1 busheling.**
Clean steel scrap, not exceeding 12 inches in any dimensions, including new factory busheling (for example, sheet clippings, stampings, etc.). May not include old auto body and fender stock. Free of metal coated, lined, vitreous enameled, and electrical sheet containing over 0.5 percent silicon.
- 207A New black sheet clippings.**
For direct charging, maximum size 8 feet by 18 inches, free of old automobile body and fender stock, metal coated, lined, vitreous enameled and electrical sheet containing over 0.5 percent silicon. Must lay reasonably flat in car.
- 208 No. 1 bundles.**
New black steel sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrel wound bundles or skeleton reels, lightly secured. May include chemically detinned material. May not include old auto body or fender stock. Free of metal coated, lined, vitreous enameled, and electrical sheet containing over 0.5 percent silicon.
- 209 No. 2 bundles.**
Old black and galvanized steel sheet scrap, hydraulically compressed to charging box size and weighing not less than 75 pounds per cubic foot. May not include tin or lead-coated material or vitreous enameled material.
- 210 Shredded scrap.**
Homogeneous iron and steel scrap, magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 50 pounds per cubic foot.
- 211 Shredded scrap.**
Homogeneous iron and steel scrap magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 70 pounds per cubic foot.

CODE	ITEM
212	Shredded clippings. Shredded 1000 series carbon steel clippings or sheets. Material should have an average density of 60 pounds per cubic foot.
213	Steel can bundles. Steel can scrap compressed to charging box size and weighing not less than 75 pounds per cubic foot. Cans may be baled without removal of paper labels, but free of other non-metallics. May include up to 5 gallon tin coated containers.
214	No. 3 bundles. Old sheet steel, compressed to charging box size and weighing not less than 75 pounds per cubic foot. May include all coated ferrous scrap not suitable for inclusion in No. 2 bundles.
215	Incinerator bundles. Tin can scrap, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Processed through a recognized garbage incinerator.
216	Terne plate bundles. New terne plate sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrel wound bundles or skeleton reels, tightly secured.
217	Bundled No. 1 steel. Wrought iron and/or steel scrap 1/8 inch or over in thickness, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Free of all metal-coated material.
218	Bundled No. 2 steel. Wrought iron or steel scrap, black or galvanized, 1/8 inch and over in thickness, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Auto body and fender stock, burnt or hand stripped, may constitute a maximum of 60 percent by weight. (This percent based on makeup of auto body, chassis, driveshafts, and bumpers.) Free of all coated material, except as found on automobiles.
219	Machine shop turnings. Clean steel or wrought iron turnings, free of iron borings, nonferrous metals in a free state, scale, or excessive oil. May not include badly rusted or corroded stock.
220	Machine shop turnings and iron borings. Same as machine shop turnings but including iron borings.
221	Shoveling turnings. Clean short steel or wrought iron turnings, drillings, or screw cuttings. May include any such material whether resulting from crushing, raking, or other processes. Free of springy, bushy, tangled or matted material, lumps, iron borings, nonferrous metals in a free state, grindings, or excessive oil.
222	Shoveling turnings and iron borings. Same as shoveling turnings, but including iron borings.

CODE	ITEM
223	Iron borings. Clean cast iron or malleable iron borings and drillings, free of steel turnings, scale, lumps or excessive oil.
224	Auto slabs. Clean automobile slabs, cut 3 feet x 18 inches and under.
225	Auto slabs. Clean automobile slabs, cut 2 feet x 18 inches and under.
226	Briquetted iron borings. Analysis and density to consumer's specifications.
227	Briquetted steel turnings. Analysis and density to consumer's specifications.
228	Mill scale. Dark colored, ranging from blue to black, ferro-magnetic iron oxide forming on the surface of steel articles during heating and working.

**The identical designations given for these two classifications are in accordance with established industry practices in specifying the materials desired.*

Electric Furnace Casting and Foundry Grades

229	Billet, bloom and forge crops. Billet, bloom, axle, slab, heavy plate and heavy forge crops, containing not over 0.05 percent phosphorus or sulphur and not over 0.5 percent silicon, free from alloys. Dimensions not less than 2 inches in thickness, not over 18 inches in width, and not over 36 inches in length.
230	Bar crops and plate scrap. Bar crops, plate scrap, forgings, bits, jars, and tool joints, containing not over 0.05 percent phosphorus or sulphur, not over 0.5 percent silicon, free from alloys. Dimensions not less than 1/2 inch in thickness, not over 18 inches in width, and not over 36 inches in length.
231	Plate and structural steel, 5 feet and under. Cut structural and plate scrap, 5 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch thickness, not over 5 feet in length and 18 inches in width. Phosphorus or sulphur not over 0.05 percent.
232	Plate and structural steel, 5 feet and under. Cut structural and plate scrap, 5 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch thickness, not over 5 feet in length and 24 inches in width. Phosphorus or sulphur not over 0.05 percent.
233	Cast steel. Steel castings not over 48 inches long or 18 inches wide, and 1/4 inch and over in thickness, containing not over 0.05 percent phosphorus or sulphur, free from alloys and attachments. May include heads, gates, and risers.
234	Punchings and plate scrap. Punchings or stampings, plate scrap, and bar crops containing not over 0.05 percent phosphorus or sulphur and not over 0.5 percent silicon, free from alloys.

CODE	ITEM
	All materials cut 12 inches and under, and with the exception of punchings or stampings, at least 1/8 inch in thickness. Punchings or stampings under 6 inches in diameter may be any gauge.
235	Electric furnace bundles. New black steel sheet scrap hydraulically compressed into bundles of size and weight as specified by consumer.
236	Cut structural and plate scrap, 3 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch in thickness, not over 3 feet in length and 18 inches in width. Phosphorus or sulphur not over 0.05 percent.
237	Cut structural and plate scrap, 2 feet and under. Same as cut structural and plate scrap, 3 feet and under, except for length.
238	Cut structural and plate scrap, 1 foot and under. Same as cut structural and plate scrap, 3 feet and under, except for length.
239	Silicon busheling. Clean silicon bearing steel scrap, not exceeding 12 inches in any dimension, including new factory busheling (for example, sheet clippings, stampings, etc.), having a silicon content of 0.05 percent to 5.0 percent.
240	Silicon Clippings. Clean steel scrap, including new factory busheling (for example, sheet clippings, stampings, etc.), may not include old auto body and fender stock. Free of metal coated, lined, vitreous enameled, and electrical sheet containing minimum 1 percent silicon.
241	Chargeable ingots and ingot butts. Chargeable ingots and ingot butts for material to be suitable and acceptable to the consumer containing not over 0.05 percent phosphorus or sulphur and not over 0.05 percent silicon free of alloys.
242	Foundry steel, 2 feet and under. Steel scrap 1/8 inch and over in thickness, not over 2 feet in length or 18 inches in width. Individual pieces free from attachments. May not include nonferrous metals, cast or malleable iron, cable, vitreous enameled, or metal coated material.
243	Foundry steel, 1 foot and under. Same specifications as 2-foot material, except for length.
244	Springs and crankshafts. Clean automotive springs and crankshafts, either new or used.
245	Alloy free turnings. Clean shoveling steel turnings free from lumps, tangled or matted material, iron borings, or excessive oil containing not more than 0.05 percent phosphorus or sulphur, and free of alloys.
246	Alloy free short shoveling steel turnings. Clean shoveling steel turnings, free of lumps, tangled or matted material, iron borings, or excessive oil, con-

CODE	ITEM
	taining not more than 0.05 percent phosphorus or sulphur, and free of alloys.
247	Alloy free machine shop turnings. Clean steel turnings, free of iron borings or excessive oil, containing not more than 0.05 percent phosphorus or sulphur, and free of alloys. May not include badly rusted or corroded stock.
248	Hard steel cut 30 inches and under. Automotive steel consisting of rear ends, crankshafts, driveshafts, front axles, springs, and gears prepared 30 inches and under. May not include miscellaneous small shoveling steel or any pieces too bulky for gray iron foundry use.
249	Chargeable slab crops. Chargeable slab crops for material to be suitable and acceptable to the consumer containing not over 0.05 percent phosphorus and 0.05 percent sulphur and not over 0.05 percent silicon and free of alloys.
250	Silicon bundles. Silicon sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot, having a silicon content of 0.50 percent to 5.0 percent.
251	Heavy turnings. Short, heavy steel turnings, containing not over 0.05 percent phosphorus or sulphur and free of alloys. May include rail chips. May not include machine shop or other light turnings and must weigh not less than 75 pounds per cubic foot in the original state of production.

Specially Processed Grades to Meet Consumer Requirements

Grades of scrap prepared especially to meet with steel mill or foundry requirements, individual specifications to be agreed on between consumer and supplier.

Cast Iron Grades

252	Cupola cast. Clean cast iron scrap such as columns, pipes, plates, and castings of a miscellaneous nature, including automobile blocks and cast iron parts of agricultural and other machinery. Free from stove plate, burnt iron, brake shoes or foreign material. Cupola size, not over 24 inches x 30 inches, and no piece over 150 pounds in weight.
253	Charging box cast. Clean cast iron scrap in sizes not over 60 inches in length or 30 inches in width, suitable for charging into an open hearth furnace without further preparation. Free from burnt iron, brake shoes, or stove plate.
254	Heavy breakable cast. Cast iron scrap over charging box size or weighing more than 500 pounds. May include cylinders and driving wheel centers. May include steel which does not exceed 10 percent of the casting by weight.
255	Hammer block or bases. Cast iron hammer blocks or bases.

CODE	ITEM
256	Burnt iron. Burnt cast iron scrap, such as stove parts, grate bars, and miscellaneous burnt iron. May include sash weights or window weights.
257	Mixed cast. May include all grades of cast iron except burnt iron. Dimensions not over 24 inches x 30 inches and no piece over 150 pounds in weight.
258	Stove plate, clean cast iron stove. Free from malleable and steel parts, window weights, plow points, or burnt cast iron.
259	Clean auto cast. Clean auto blocks; free of all steel parts except camshafts, valves, valve springs, and studs. Free of nonferrous and non-metallic parts.
260	Unstripped motor blocks. Automobile or truck motors from which steel and nonferrous fittings may or may not have been removed. Free from driveshafts and all parts of frames.
261	Drop broken machinery cast. Clean heavy cast iron machinery scrap that has been broken under a drop. All pieces must be of cupola size, not over 24 inches x 30 inches, and no piece over 150 pounds in weight.
262	Clean auto cast, broken, not degreased. Clean auto blocks, free of all steel parts except camshafts, valves, valve springs and studs. Free of nonferrous and non-metallic parts, and must be broken to cupola size, 150 pounds or less.
263	Clean auto cast, degreased. Free of all steel parts except camshafts, valves, valve springs, and studs. Free of nonferrous and non-metallic parts, and must be broken into cupola size, 150 pounds or less.
264	Malleable. Malleable parts of automobiles, railroad cars, locomotives, or miscellaneous malleable iron castings. Free from cast iron and steel parts and other foreign material.
265	Broken ingot molds and stools. Broken ingot molds and stools, cast iron, maximum size 2 feet x 3 feet x 5 feet.
266	Unbroken ingot molds and stools. Unbroken ingot molds and stools, cast iron.

Special Boring Grades

267	No. 1 chemical borings. New clean cast or malleable iron borings and drillings containing not more than 1 percent oil, free from steel turnings, or chips, lumps, scale, corroded or rusty material.
268	Briquetted cast iron borings, hot process. Cast iron borings, heated, briquetted, to a density of approximately 85 percent, oil and water content under 1 percent.

CODE	ITEM
269	Briquetted cast iron borings, cold process. Cast iron boring briquettes, free of steel and nonferrous material, hydraulically compressed into a cohesive solid, reasonably free of oil, and having a density of not less than 60 percent.
270	Malleable borings. Clean malleable iron borings and drillings, free of steel turnings, scale, lumps and excessive oil.
271	No. 2 chemical borings. New clean cast or malleable iron borings and drillings, containing not more than 1.5 percent oil, free from steel turnings, or chips, lumps, scale, corroded or rusty material.

Steel From Scrap Tires

General Guidelines

Items not covered in the specifications, and any variations in the specification, are subject to special arrangement between buyer and seller. Percentages listed below are by weight.

Preparation

Consumer and supplier to agree upon preparation for transport, such as the following:

Loose—Whole.

Loose—Chopped. If wire is chopped or shredded, parties may wish to specify the means of processing and/or characteristics of the final product (density, length of pieces, etc.).

Baled. Bales of wire should maintain their form during loading, shipment, unloading, storage, and handling typical of that done at a consuming facility, unless otherwise specified.

Baled—High Density. Hydraulically compressed, no dimension larger than 24", density of at least 75 pounds per square foot.

Baled—HRB/Low Density. Density of less than 75 pounds per square foot. Each bale secured with sufficient number of bale ties drawn tight to insure a satisfactory delivery.

Other Means of Preparation. Individual specifications to be agreed upon between consumer and supplier.

272	Pulled bead wire (Truck)—Grade 1. Not chopped; made up of loops of wire. Less than five percent (<5%) rubber/fiber.
273	Pulled bead wire (Truck)—Grade 2. Not chopped; made up of loops of wire. Five to ten percent (5-10%) rubber/fiber.
274	Pulled bead wire (Truck)—Grade 3. Not chopped; made up of loops of wire. Greater than ten percent (>10%) rubber/fiber.
275	Pulled bead wire (Passenger)—Grade 1. Not chopped; made up of loops of wire. Less than five percent (<5%) rubber/fiber.
276	Pulled bead wire (Passenger)—Grade 2. Not chopped; made up of loops of wire. Five to ten percent (5-10%) rubber/fiber.

CODE	ITEM
277	Pulled bead wire (Passenger)—Grade 3. Not chopped; made up of loops of wire. Greater than ten percent (>10%) rubber/fiber.
278	Processed tire wire (Ferrous)—Grade 1. Chopped. Less than two percent (<2%) rubber/fiber.
279	Processed tire wire (Ferrous)—Grade 2. Chopped. Less than five percent (<5%) rubber/fiber.
280	Processed tire wire (Ferrous)—Grade 3. Chopped. Five to ten percent (5-10%) rubber/fiber.
281	Processed tire wire (Ferrous)—Grade 4. Chopped. Ten to twenty percent (10-20%) rubber/fiber.
282	Processed tire wire (Ferrous)—Grade 5. Chopped. Greater than twenty percent (>20%) rubber/fiber.

Railroad Ferrous Scrap*

Specifications of Association of American Railroads promulgated by its Purchases and Materials Management Division (Revised 1973)

(2)	Axles, Steel. Solid car and/or locomotive friction bearing, 8 inch diameter and under (free of axles with key-way between wheel seats, no axles of shorter lengths than distance between wheel seats to be included).	(12)	Cast Iron, No. 1. Cast iron scrap, such as columns, pipes, plates, and/or castings of miscellaneous nature, but free from stove plates, brake shoes, and burnt scrap. Must be cupola size, not over 24 x 30 inches in dimension and no piece to weigh over 150 pounds. Must be free from foreign material.
(2A)	Axles, Steel. Solid car and/or locomotive friction bearing over 8 inch diameter (free of axles with key-way between wheel seats, no axles of shorter length than distance between wheel seats to be included).	(13)	Cast Iron, No. 2. Pieces weighing over 150 pounds, but not more than 500 pounds. Free from burnt cast.
(3)	Axles, Steel. Roller bearing 8 inch diameter and under (no axles of shorter lengths than distance between wheel seats to be included).	(14)	Cast Iron, No. 3. Pieces weighing over 500 pounds; includes cylinders, driving wheel centers and/or all other castings. (Free from hammer blocks or bases.)
(3A)	Axles, Steel. Roller bearing over 8 inch diameter (no axles of shorter length than distance between wheel seats to be included).	(15)	Cast Iron, No. 4. Burnt cast iron scrap, such as grate bars, stove parts and/or miscellaneous burnt scrap.
(4)	Spikes, Track Bolts and Nuts, and Lock Washers, may include Rail Anchors.	(16)	Cast Iron Brake Shoes. Brakes shoes of all types except composition-filled shoes.
(5)	Tie Plates. Steel.	(17)	Couplers and/or Knuckles. Railroad car and/or locomotive steel couplers, knuckles and/or locks stripped clean of all other attachments.
(6)	Rail Joints, Angle and/or Splice Bars. Steel.	(18)	Frogs and/or Switches, uncut. Steel frogs and switches that have not been cut apart, exclusive of manganese.
(9)	Bolsters and/or Truck Sides, Frames: Uncut. Cast steel.	(18A)	Railbound Manganese Frogs and Switch Points with manganese inserts that have not been cut apart.
(11)	Cast Steel, No. 2. Steel castings, over 18 inches wide and/or over 5 feet long.	(23)	Malleable. Malleable parts of automobiles, railroad cars, locomotive and/or miscellaneous malleable castings.
(11A)	Cast Steel, No. 1. Steel castings, 18 inches and under, not over 5 feet long, including cut truck side frames and bolsters.	(24)	Melting Steel, Railroad No. 1. Clean wrought iron or steel scrap, ¼ inch and over in thickness, not over 18 inches in width, and not over 5 feet in length. May include pipe ends and material 1/8 inch to ¼ inch in thickness, not over 15 inches x 15 inches. Individual pieces cut so as to lie reasonably flat in charging box.
		(27)	Rail, Steel No. 1. Standard section tee rails, original weight 50 pounds per yard or heavier, 10 feet long and over. Suitable for rerolling into bars and shapes. Free from bent and twisted rails, frog, switch, and guard rails, or rails with split heads and broken flanges. Continuous welded rail may be included provided no weld is over 9 inches from the end of the piece of rail.
		(28A)	Rail, Steel No. 2 Cropped Rail Ends. Standard section, original weight of 50 pounds per yard and over, 18 inches long and under.
		(28B)	Rail, Steel No. 2 Cropped Rail Ends. Standard section, original weight of 50 pounds per yard and over, 2 feet long and under.
		(28C)	Rail, Steel No. 2 Cropped Rail Ends. Standard section, original weight 50 pounds per yard and over, 3 feet long and under.

CODE	ITEM	CODE	ITEM
(29)	Rail, Steel No. 3. Standard section tee, girder, and/or guard rails, to be free from frog and switch rails not cut apart, and contain no manganese, cast, welds, or attachments of any kind except angle bars. Free from concrete, dirt, and foreign material of any kind.	(36)	Tires. All locomotive, not cut to specified lengths.
(30)	Sheet Scrap, No. 1. Under $\frac{3}{16}$ inch thick, may include hoops, band iron and/or steel, scoops and/or shovels (free of wood). Must be free from burnt or metal coated material, cushion, or other similar springs.	(38)	Turnings, No. 1. Heavy turnings from wrought iron and/or steel railroad axles or heavy forgings and/or rail chips, to weigh not less than 75 pounds per cubic foot. Free from dirt or other foreign material of any kind. Alloy steel scrap may be excluded from these specifications by mutual agreement between buyer and seller.
(31)	Sheet Scrap, No. 2. Galvanized or lined material and/or gas retorts, and/or any other iron or steel material not otherwise classified.	(38A)	Turnings, Drillings and/or Borings, No. 2. Cast, wrought, steel and/or malleable iron borings, turnings and/or drillings mixed with other metals.
(32)	Steel, Tool. (Specify kind in offering.)	(40)	Wheels, No. 1. Cast iron car wheels.
(33)	Steel, Manganese. All kinds of manganese, rail, guard rails, frogs and/or switch points, cut or uncut.	(42)	Wheels, No. 3. Solid cast steel, forged, pressed and/or rolled steel car and/or locomotive wheels, not over 42 inches diameter. (Specify kind in offering.)
(34)	Steel, Spring. Coil and/or elliptical, minimum thickness $\frac{1}{4}$ inch, may be assembled or cut apart.	(45)	Destroyed Steel Cars. Bodies of steel cars cut apart sufficiently to load. (Specify kind.)
(34A)	Steel, Spring. Coil only.	(45A)	Destroyed Steel Car Sides and Box Car Roofs. Cut to a maximum length of... and a maximum width of... suitable for use in super presses and shears without additional preparation.
(35)	Structural, Wrought Iron and/or Steel Uncut. All steel or steel mixed with iron from bridges, structures and/or equipment that has not been cut apart, may include uncut bolsters, brakebeams, steel trucks, underframes, channel bars, steel bridge plates, frog and/or crossing plates and/or other steel of similar character.		

**Specifications in force as of publication date.*

Guidelines for Glass Cullet: GC-2006

Container Glass Cullet Specifications

Preamble

These standards and practices apply to container glass cullet for purchase or sale in the United States and Canada. Transactions covering shipments to or from other countries may also be in accordance with these standards and practices and may be modified by mutual agreement between buyer and seller. These specifications are guidelines for buying and selling container glass cullet and always subject to the buyer and seller's agreement.

Scrap Glass Definitions

Container Glass Cullet: crushed or whole scrap soda-lime-silica container glass.

Unprocessed Container Glass Cullet: broken or whole scrap glass containers that comply with the proper ISRI glass specifications.

Processed (Furnace Ready) Container Glass Cullet: crushed and whole contaminate-free scrap container glass that complies with the proper ISRI glass specifications.

Organic Matter: consists of organic materials that are non-container glass items; for example, paper labels should not exceed 0.2%.

Ferrous Materials: are magnetic metals, i.e. steel, iron, etc., and therefore must be removed during scrap glass processing.

Non-ferrous Materials: are non-magnetic metals, i.e. aluminum, lead, copper, etc., and therefore must be removed during glass processing.

The Purchase Agreement

Each transaction covering the purchase or sale of container glass cullet should be confirmed in writing and include agreement on the following items:

1. Product

Where possible, each container glass cullet grade shall be specified in accordance with the grade as defined.

2. Quantity

Where possible, the quantity shall always be specified in terms of a definite number of tons of 2,000 pounds each.

A. If the quantity is specified in tons, the order shall be considered completed when aggregate shipments are 5% under or over the quantity ordered.

B. If the quantity is specified in carloads or truckloads, a "load" shall be defined as a truck, trailer, or railroad car loaded to full visible capacity not to exceed established legal weight limits.

3. Packaging

It should be stated whether shipped units are to be in boxes, or in bulk by railroad car, truck, or trailer. Where possible, approximate weights should be specified.

4. Price Units

The price agreed upon shall be clearly stated in US dollars and cents per 2,000 pounds or in US dollars and cents per hundred weight.

5. Terms

Terms shall be "net cash 30 days after date of shipment" unless otherwise agreed upon.

Arbitration

In the event of a total disagreement between buyer and seller, the dispute should be submitted to ISRI arbitration.

In all cases, the cost of arbitration shall be borne by the party found to be at fault, or split in the event of compromise, as determined by the arbitrators.

UNPROCESSED FLINT CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica beverage or food container glass.

Cullet Colors Segregation: Flint Cullet

Flint	95-100%
Amber	0-5%
Green	0-5%
Other Colors	0-5%

Size: Cullet may be broken but not pulverized.

Moisture: Cullet should be free of excess moisture.

Contaminant Listings:

Outthrow Materials: Normal container labels; ring and metal closures where processing capabilities permit.

Prohibitive Materials: Non-acceptable items include non-container glass (vision ware, light bulbs, crystal, windows, mirrors, drinking glasses, ceramic, milk glass, etc.) metals, ores, minerals, bricks, clay, grinding and refractory materials, rocks, clay and ceramic closures.

General: The quality of the unprocessed flint container glass cullet must be such that after beneficiation with a conventional container glass cullet processor it will be suitable for the production of glass containers.

UNPROCESSED AMBER CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica beverage or food container glass.

Cullet Colors Segregation: Amber Cullet

Amber	90-100%
Flint	0-5%
Green	0-5%
Other Colors	0-5%

Size: Cullet may be broken but not pulverized.

Moisture: Cullet should be free of excess moisture.

Contaminant Listings:

Outthrow Materials: Normal container labels; ring and metal closures where processing capabilities permit.

Prohibitive Materials: Non-acceptable items include non-container glass (vision ware, light bulbs, crystal, windows, mirrors, drinking glasses, ceramic, milk glass, etc.) metals, ores, minerals, bricks, clay, grinding and refractory materials, rocks, clay and ceramic closures.

General: The quality of the unprocessed amber container glass cullet must be such that after beneficiation with a conventional container glass cullet processor it will be suitable for the production of glass containers.

UNPROCESSED GREEN CONTAINER GLASS CULLET SPECIFICATIONS

Composition: soda-lime-silica beverage or food container glass.

Cullet Colors Segregation: Green Cullet

Green	90-100%
Flint	0-10%
Amber	0-10%
Other Colors	0-5%

Size: Cullet may be broken but not pulverized.

Moisture: Cullet should be free of excess moisture.

Contaminant Listings:

Outthrow Materials: Normal container labels; ring and metal closures where processing capabilities permit.

Prohibitive Materials: Non-acceptable items include non-container glass (vision ware, light bulbs, crystal, windows, mirrors, drinking glasses, ceramic, milk glass, etc.); metals, ores, minerals, bricks, clay, grinding and refractory materials, rocks, clay and ceramic closures.

General: The quality of the unprocessed green container glass cullet must be such that after beneficiation with a conventional container glass cullet processor it will be suitable for the production of glass containers.

PROCESSED (FURNACE READY) FLINT CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica container glass.

Container Glass Cullet Colors Segregation: Flint Cullet

Flint	95-100%
Amber	0-5%
Green	0-1%
Other Colors	0-5%
Total NON-Flint Cullet	= <5%

Size: Various sizes from whole glass containers to -100 Mesh. However, the ideal material size is 3/8" to 3/4" with a 10% minimum of fine particles. Material size is based upon buyer and seller's agreement.

Contaminant Listings:

Outthrow Materials: Organic Matter, allowable percentage based upon buyer and seller's agreement.

Prohibitive Materials:

- Ferrous Metals
- Nonferrous Metals
- Ceramics (such as cups, saucers, dinnerware, pottery, etc.)
- Other Glass (for example, plate window glass, heat-resistant glass—such as Pyrex—and lead-based glass—such as crystal ware, television tubes, vision ware, etc.)
- Other Materials (such as bricks, rocks, etc.)

PROCESSED (FURNACE READY) AMBER CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica container glass

Container Glass Cullet Colors Segregation: Amber Cullet

Amber	90-100%
Flint	0-10%
Green	0-10%
Other Colors	0-5%
Total NON-Amber Cullet =	<10%

Size: Various sizes from whole glass containers to -100 Mesh. However, the ideal material size is 3/8" to 3/4" with a 10% minimum of fine particles. Material size is based upon buyer and seller's agreement.

Contaminant Listings:

Outthrow Materials: Organic Matter, allowable percentage based upon buyer and seller's agreement.

Prohibitive Materials:

- Ferrous Metals
- Nonferrous Metals
- Ceramics (such as cups, saucers, dinnerware, pottery, etc.)
- Other Glass (for example, plate window glass, heat-resistant glass—such as Pyrex—and lead-based glass—such as crystal ware, television tubes, vision ware, etc.)
- Other Materials (such as bricks, rocks, etc.)

PROCESSED (FURNACE READY) GREEN CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica container glass

Container Glass Cullet Colors Segregation: Green Cullet

Green	70-100%
Flint	0-15%
Amber	0-15%
Other Colors	0-10%
Total NON-Green Cullet =	<30%

The color green typically consists of a variety of shades, for example: emerald green or lime green.

Size: Various sizes from whole glass containers to -100 Mesh. However, the ideal material size is 3/8" to 3/4" with a 10% minimum of fine particles. Material size is based upon buyer and seller's agreement.

Contaminant Listings:

Outthrow Materials: Organic Matter, allowable percentage based upon buyer and seller's agreement.

Prohibitive Materials:

- Ferrous Metals
- Nonferrous Metals
- Ceramics (such as cups, saucers, dinnerware, pottery, etc.)
- Other Glass (for example, plate window glass, heat-resistant glass—such as Pyrex—and lead based glass—such as crystal ware, television tubes, vision ware, etc.)
- Other Materials (such as bricks, rocks, etc.)

Guidelines for Paper Stock: PS-2006—Domestic Transactions

Paper Stock: Domestic Transactions

Preamble

These standards and practices apply to paper stock for repulping only and are for use in the United States and Canada. Transactions covering shipments to or from other countries may also be in accordance with these standards and practices and may be modified by mutual agreement between buyer and seller.

Basic to the Success of any Buyer-Seller Relationship is an Atmosphere of "Good Faith."

In keeping with this, the following underlying principles have been accepted as necessary to the maintenance of amicable dealings:

1. Seller must use due diligence to ascertain that shipments consist of properly packed paper stock and that shipment is made during the period specified.
2. Arbitrary rejections, deductions and cancellations by the buyer are counter to acceptable good trade practice.
3. Seller shall deliver the quality of paper stock agreed upon but shall not be responsible for its use or the paper or paperboard manufactured therefrom.

I. The Purchase Agreement

Each transaction covering the purchase or sale of paper stock should be confirmed in writing and include agreement on the following items:

1. Quantity

Where possible, the quantity shall always be specified in terms of a definite number of tons of 2,000 lbs. each.

- a. If the quantity is specified in tons, the order shall be considered completed when aggregate shipments are 5% under or over the quantity ordered.
- b. If the quantity is specified in carloads or truckloads, a "load" shall be defined as a truck, trailer or railcar loaded to full visible capacity not to exceed established legal weight limits.

2. Grades

Where possible, each grade purchased shall be specified in accordance with the grade as defined in SECTION VI hereof.

3. Packing

Whether units are to be bales, skids, rolls, pallets, boxes, securely tied bundles or loose should be stated. Where possible, approximate sizes or weights should be specified.

4. Price Units

The price agreed upon shall be clearly stated in dollars and cents per 2,000 lbs. or in dollars and cents per hundred-weight.

5. Transportation charge

This shall be clearly indicated with the use of the phrases "f.o.b. shipping point" or "delivered destination" or "f.o.b. shipping point—(\$\$\$) freight allowed."

6. Shipping Instructions

Shipping instructions should clearly specify shipping schedule, route, delivery carrier and destination.

7. Shipping Period

The shipping period shall be understood to be within 30 days of date of order unless otherwise specified.

8. Terms

Terms shall be "net cash 30 days after date of shipment" unless otherwise agreed upon.

9. Method of Invoicing

Invoicing instructions shall be clearly stated.

II. Fulfillment by the Seller

The practice of the Seller shall be in accordance with the following:

1. Acceptance

All orders shall be confirmed in writing.

2. Grading

Paper stock sold under the grade names appearing in SECTION VI shall conform to those grading definitions.

3. Baling

Each bale must be secured with a sufficient number of bale ties drawn tight to ensure a satisfactory delivery.

4. Tare

If agreed by the Buyer, sides and headers may be used to make a satisfactory delivery of the bales but must not be excessive. The weight of skids, Gaylord boxes and other similar materials shall be deducted from the gross invoice weight.

5. Loading

Paper stock shall be loaded as follows:

- a. Before they are loaded, railcars and trucks shall be free from objectionable materials and odors, and shall have sound floors and doors.
- b. All loads should consist entirely of one grade of paper stock unless otherwise agreed to. When two or more grades are included in the same load, units of each grade should be kept together in a separate part of the railcar or truck.
- c. Paper stock must be loaded in a manner that will minimize shifting and breakage. Excessive breakage due to improper loading can be cause for rejection.
- d. Paper stock shall be loaded in accordance with industry safety best practices.

Paper Stock Industries

A NATIONAL CHAPTER OF SCRAP RECYCLING INDUSTRIES, INC

Please refer to the following guide for valuable safety information: <http://www.isri.org/safeshipping>

6. Shipping Notice/Bill of Lading

Shipping by Truck

A bill of lading or shipping notice shall accompany each shipment to the Buyer and should include the following:

- a. Date of shipment
- b. Release number (if applicable)
- c. Number of bales/rolls
- d. Grade of paper
- e. Name of trucking company, trailer number and driver's signature
- f. Shipper's signature

Shipping by Rail

When shipping by railcar, a bill of lading with shipping instructions shall be provided to the railroad and to the Buyer immediately upon release of the railcar and these documents should include the following:

- a. Date of shipment
- b. Release number (if applicable)
- c. Number of bales/rolls
- d. Grade of paper
- e. Car number
- f. Weighing instructions
- g. Routing
- h. Destination
- i. Shipper's signature

7. Invoicing

Invoices, if required, should conform to instructions on the order and include the following data:

- a. Date of shipment
- b. Railcar or truck number
- c. Customer's order number
- d. Release Number (if applicable)
- e. Shipper's invoice number
- f. FOB point
- g. Number of units (bales, rolls, skids etc.)
- h. Weight and grade
- i. Price and extension
- j. Payment terms

8. Rejection

When notified of a rejection, the Seller must, within two business days, advise the Buyer as to which of the following procedures the Seller has decided upon:

- a. Agree with the Buyer to a compromise acceptance and settlement.
- b. Inspect the quality of the rejected material. The inspection and final disposition by the Seller shall take place within three business days of the notification. By mutual agreement, this time limit may be exceeded.
- c. Order reshipment of the material.

- d. Request that the Buyer agree to submit the rejected shipment to arbitration.

III. Fulfillment by the Buyer

The practice of the Buyer shall be in accordance with the following:

Upon receipt of the shipment, the Buyer is to make all possible effort to inspect the contents while it is still loaded.

- a. **Acceptable Loads** (i.e. quality of paper stock, weight, bale integrity, moisture, order quantity, etc.)
 - if the shipment appears to be in accordance with the order, the shipping notice and other parameters as established between the Buyer and the Seller, the Buyer shall proceed with the unloading and shall provide the Seller with the receiving weights within three business days of unloading.
- b. **Unacceptable Loads** (i.e. quality of paper stock, weight, bale integrity, moisture, order quantity, etc.)
 - if the shipment does not appear to be in accordance with the order, the shipping notice or any other parameters as established between the Buyer and the Seller, the Buyer shall **immediately** notify the Seller.
 - the Buyer shall set aside any portion of the shipment that is controversial and take reasonable care to protect that paper stock from any external deterioration or contamination until the final disposition of that shipment is determined.

Buyer has 21 days to downgrade or reject

- if the Buyer, at any time with 21 calendar days after receipt of a shipment, finds objectionable materials heretofore not visible, the Buyer shall have the right to downgrade or reject the paper stock and shall immediately notify the Seller. The Seller will then determine the final disposition of the shipment.
- in the event of a rejection, the Buyer shall be responsible for any paper stock used by the Buyer, and the attendant freight, other than such quantity as may be considered reasonable for laboratory sampling or testing purposes.

IV. Miscellaneous Practices

1. Ownership

- a. If the shipment is purchased "f.o.b. shipping point" and is in accordance with the agreement covering the transaction, it becomes the property of the Buyer when loaded on the transportation vehicle.
- b. If the shipment is purchased on a "delivered destination" basis and is in accordance with the agreement covering the transaction, it remains the property of the Seller until it is delivered to the Buyer by carrier.
- c. If the shipment is purchased on an "f.o.b. shipping point-specified freight allowed" basis and is in accor-

dance with the agreement covering the transaction, it becomes the property of the Buyer when loaded on the transportation vehicle.

2. Demurrage Charges

- a. Any demurrage accrued on a shipment due to the failure of the Seller to ship in accordance with the order, except with respect to quality, is the liability of the Seller.
- b. In the event that a rejection for quality stands, any demurrage accruing on the shipment prior to notification to the Seller shall be the Buyer's liability.
- c. In the event that negotiation of a substantiated rejection for quality results in agreement by the Buyer to accept the shipment, then only the demurrage, following notification of rejection—and including 24 hours after the agreement—becomes the liability of the Seller. Demurrage accruing prior to and including the day of notification becomes the liability of the Buyer.

3. Carrier Selection

- a. F.O.B. Shipping Point. Selection of the carrier is at the discretion of the Buyer unless otherwise agreed.
- b. F.O.B. Delivered. Selection of the carrier is at the discretion of the Seller unless otherwise agreed. Should the Buyer specify a carrier or routing which results in a freight cost higher than would have occurred had the Seller selected the carrier or routing, the difference shall be charged to the Buyer.
- c. Any extra switching or excess freight charges accruing on a shipment due to the failure to the Seller to protect the agreed upon minimum rail rate or to ship in accordance with the agreement, is the liability of the Seller.

4. Weight Discrepancies

No debits, credits or adjustments shall be issued on any shipment of paper stock when the weight variation is 1% or less.

In the event that a discrepancy exceeds those parameters mentioned above as "allowable," the Buyer and Seller shall exchange copies of unloading and loading records showing individual bale weights. In the event that both parties have such records, and errors cannot be determined, it is recommended that the weight closest to the public carrier's scale weight be assumed to be correct. In the absence of such records on the part of one of the parties, the records of the other party shall govern.

5. Moisture content

- a. All paper must be packed air dry.

Where excess moisture is present in the shipment, the Buyer has the right to request an adjustment and if a settlement cannot be reached, the Buyer has the right to reject the shipment.

6. Replacement of Shipment

- a. In the event that any shipment is rejected due to quality:

Whether or not the shipment is to be replaced is to be decided by mutual agreement between Buyer and Seller.

7. Promptness of Shipment

In the event that shipments are postponed:

- a. On instructions of the BUYER, the Seller shall have the option of extending the time limit of the order by the same number of days of the postponement, or of canceling that portion of the order on which shipment was postponed. Seller shall promptly notify Buyer of option selected.
- b. On the instructions of the SELLER, the Buyer shall have the option of extending the time limit of the order by the same number of days of the postponement, or of canceling that portion of the order on which shipment was postponed. Buyer shall promptly notify Seller of option selected.

V. Arbitration

1. In the event of a total disagreement between Buyer and Seller, the dispute should be submitted to ISRI arbitration.
2. In all cases, the cost of arbitration shall be borne by the party found to be at fault, or split in the event of compromise, as determined by the arbitrators.

VI. Grade Definitions

The definitions which follow describe grades as they should be sorted and packed. CONSIDERATION SHOULD BE GIVEN TO THE FACT THAT PAPER STOCK AS SUCH IS A SECONDARY MATERIAL PRODUCED MANUALLY AND MAY NOT BE TECHNICALLY PERFECT. Definitions may not specifically address all types of processes used in the manufacture or recycling of paper products. Specific requirements should be discussed between Buyer and Seller during negotiations.

Outthrows

The term "Outthrows" as used throughout this section is defined as "all papers that are so manufactured or treated or are in such a form as to be unsuitable for consumption as the grade specified."

Prohibitive Materials

The term "Prohibitive Materials" as used throughout this section is defined as:

- a. Any materials which by their presence in a packing of paper stock, in excess of the amount allowed, will make the packaging unusable as the grade specified.
- b. Any materials that may be damaging to equipment.

Note: The maximum quantity of "Outthrows" indicated in connection with the following grade definitions is understood to be the TOTAL of "Outthrows" and "Prohibitive Materials."

A material can be classified as an "Outthrow" in one grade and as a "Prohibitive Material" in another grade. Carbon paper, for instance, is "UNSUITABLE" in Mixed Paper and is, therefore, classified as an "Outthrow;" whereas it is "UNUSABLE" in White Ledger and in this case is classified as a "Prohibitive Material."

Glossary of Terms

A supplemental glossary of paper stock terms is located on page 29. The purpose of this limited list of terms is to help the user better understand specific grade definitions contained within this Circular.

(1) Soft Mixed Paper

Consists of a mixture of various qualities of paper not limited as to type of baling or fiber content.

Prohibitive Materials may not exceed	2%
Total Outthrows may not exceed	10%

(2) Mixed Paper

Consists of a clean, sorted mixture of various qualities of paper containing less than 10% of groundwood content.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	3%

(3) (Grade not currently in use)

(4) Boxboard Cuttings

Consists of new cuttings of paperboard used in the manufacture of folding cartons, set-up boxes and similar boxboard products.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(5) Mill Wrappers

Consists of paper used as outside wrap for rolls, bundles, or skids of finished paper.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	3%

(6) News

Consists of newspaper as typically generated from news drives and curbside collections.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	5%

(7) News, De-ink Quality (#7 ONP)

Consists of sorted, fresh newspapers, not sunburned, containing not more than the normal percentage of rotogravure and colored sections. May contain magazines.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/4 of 1%

(8) Special News, De-ink Quality (#8 ONP)

Consists of sorted, fresh newspapers, not sunburned, free from magazines, white blank, pressroom over-issues, and paper other than news, containing not more than the normal percentage of rotogravure and colored sections. This grade must be tare-free.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/4 of 1%

(9) Over-Issue News (OI or DIN)

Consists of unused, overrun newspapers printed on newsprint, containing not more than the normal percentage of rotogravure and colored sections.

Prohibitive Materials	None permitted
Total Outthrows	None permitted

(10) Magazines (OMG)

Consists of coated magazines, catalogues, and similar printed materials. May contain a small percentage of uncoated news-type paper.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	3%

(11) Corrugated Containers (OCC)

Consists of corrugated containers having liners of either test liner, jute or kraft.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	5%

(12) Double-Sorted Corrugated (DS OCC)

Consists of double-sorted corrugated containers, generated from supermarkets and/or industrial or commercial facilities, having liners of test liner, jute, or kraft. Material has been specially sorted to be free of boxboard, off-shore corrugated, plastic, and wax.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(13) New Double-Lined Kraft Corrugated Cuttings (DLK)

Consists of new corrugated cuttings having liners of either test liner, jute, or kraft. Treated medium or liners, insoluble adhesives, butt rolls, slabbed or hogged medium, are not acceptable in this grade.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(14) Fiber Cores

Consists of paper cores made from either chipboard and/or linerboard, single or multiple plies. Metal or plastic end caps, wood plugs, and textile residues are not acceptable in this grade.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	5%

(15) Used Brown Kraft

Consists of brown kraft bags free of objectionable liners and original contents.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(16) Mixed Kraft Cuttings

Consists of new brown kraft cuttings, sheets and bag scrap free of stitched paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	.1%

(17) Carrier Stock

Consists of printed or unprinted, unbleached new beverage carrier sheets and cuttings. May contain wet strength additives.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(18) New Colored Kraft

Consists of new colored kraft cuttings, sheets and bag scrap, free of stitched papers.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(19) Grocery Bag Scrap (KGB)

Consists of new brown kraft bag cuttings, sheets and misprint bags.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(20) Kraft Multi-Wall Bag Scrap

Consists of new brown kraft multi-wall bag cuttings, sheets, and misprint bags, free of stitched papers.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(21) New Brown Kraft Envelope Cuttings

Consists of new unprinted brown kraft envelopes, cuttings or sheets.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(22) Mixed Groundwood Shavings

Consists of trim of magazines, catalogs and similar printed matter, not limited with respect to groundwood or coated stock, and may contain the bleed of cover and insert stock as well as beater-dyed paper and solid color printing.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(23) Telephone Directories

Consists of clean telephone directories printed for or by telephone directory publishers.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(24) White Blank News (WBN)

Consists of unprinted cuttings and sheets of white newsprint or other uncoated white groundwood paper of similar quality.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(25) Groundwood Computer Printout (GW CPO)

Consists of groundwood papers which are used in forms manufactured for use in data processing machines. This grade may contain colored stripes and impact or nonimpact (e.g., laser) computer printing.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(26) Publication Blanks (CPB)

Consists of unprinted cuttings or sheets of white coated or filled groundwood content paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(27) Flyleaf Shavings

Consists of trim from magazines, catalogs and similar printed matter. May contain the bleed of cover and insert stock to a maximum of 10% dark colors. Beater-dyed paper may not exceed 2%. Shavings of novel news or newsprint grades may not be included in this grade.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(28) Coated Soft White Shavings (SWS)

Consists of unprinted, coated, and uncoated shavings and sheets of white groundwood-free printing paper. May contain a small percentage of groundwood.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(29) (Grade not currently in use)**(30) Hard White Shavings (HWS)**

Consists of shavings or sheets of unprinted, untreated white groundwood-free paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(31) Hard White Envelope Cuttings (HWEK)

Consists of groundwood-free cuttings, shavings, or sheets of unprinted, untreated, and uncoated white envelope paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(32) (Grade not currently in use)**(33) New Colored Envelope Cuttings**

Consists of groundwood-free cuttings, shavings, or sheets of untreated, uncoated bleachable colored envelope paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(34) (Grade not currently in use)**(35) Semi Bleached Cuttings**

Consists of sheets and cuttings of unprinted, untreated, groundwood-free paper such as file folder stock, manila tabulating card trim, untreated milk carton stock, or manila tag.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(36) (Grade not currently in use)**(37) Sorted Office Paper (SOP)**

Consists of paper, as typically generated by offices, containing primarily white and colored groundwood-free paper, free of unbleached fiber. May include a small percentage of groundwood computer printout and facsimile paper.

Prohibitive Materials may not exceed	2%
Total Outthrows may not exceed	5%

(38) (Grade not currently in use)**(39) Manifold Colored Ledger (MCL)**

Consists of sheets, shavings, and cuttings of industrially-generated printed or unprinted colored or white groundwood-free paper. All stock must be uncoated and free of nonimpact printing. A percentage of carbonless paper is allowable.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(40) Sorted White Ledger (SWL)

Consists of uncoated, printed or unprinted sheets, shavings, guillotined books, and cuttings of white groundwood-free ledger, bond, writing, and other paper which has similar fiber and filler content.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(41) Manifold White Ledger (MWL)

Consists of sheets, shavings, and cuttings of industrially-generated printed or unprinted white groundwood-free paper. All stock must be uncoated and free of nonimpact printing.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(42) Computer Printout (CPO)

Consists of white groundwood-free paper in forms manufactured for use in data processing machines. This grade may contain colored stripes and impact or non-impact (e.g. laser) computer printing, and may contain no more than 5% groundwood in the pack. All stock must be untreated and uncoated.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(43) Coated Book Stock (CBS)

Consists of coated groundwood-free paper, printed or unprinted in sheets, shavings, guillotined books and cuttings. A reasonable percentage of paper containing fine groundwood may be included.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(44) Coated Groundwood Sections (CGS)

Consists of printed, coated groundwood paper in sheets, sections, shavings or guillotined books. This grade may not include news quality groundwood paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(45) Printed Bleached Board Cuttings

Consists of groundwood-free printed bleached board cuttings, free from misprint sheets, cartons, wax, greaseproof lamination, gilt, and inks, adhesives or coatings that are insoluble.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(46) Misprinted Bleached Board

Consists of groundwood-free misprint sheets and cartons of bleached board, free from wax, greaseproof lamination, gilt, and inks, adhesives or coatings that are insoluble.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	2%

(47) Unprinted Bleached Board

Consists of groundwood-free unprinted, untreated bleached board cuttings, sheets or rolls, free from wax, greaseproof lamination and adhesives or coatings that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(48) #1 Bleached Cup Stock (#1 Cup)

Consists of untreated cuttings or sheets of coated or uncoated cup base stock. Cuttings with slight bleed may be included. Must be free of wax, poly, and other coatings that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(49) #2 Printed Bleached Cup Stock (#2 Cup)

Consists of printed, untreated formed cups, cup die cuts, and misprint sheets of coated or uncoated cup base stock. Glues must be water soluble. Must be free of wax, poly, and other coatings that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(50) Unprinted Bleached Plate Stock

Consists of groundwood-free bleached coated or uncoated, untreated and unprinted plate cuttings and sheets.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(51) Printed Bleached Plate Stock

Consists of groundwood-free bleached coated or uncoated, untreated printed plates and sheets. Must be free of coatings or inks that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

Specialty Grades

The grades listed below are produced and traded in carload and truckload quantities throughout the United States, and because of certain characteristics (i.e., the presence of wet strength, polycoatings, plastic, foil, carbon paper, hot melt glue), are not included in the regular grades of paper stock. However, it is recognized that many mills have special equipment and are able to utilize large quantities of these grades. Since many paper mills around the world do use these specialty grades, they are being listed with appropriate grade numbers for easy reference.

The Paper Stock Industries Chapter of ISRI is not establishing specific specifications, which would refer to such factors as the type of wet strength agent used, the percentage of wax, the amount of polycoating, whether it is on top of or under the printing, etc. The specification for each grade should be determined between Buyer and Seller, and it is recommended that purchase be made based on sample.

These specialty grades are as follows:

1-S	White Waxed Cup Cuttings
2-S	Printed Waxed Cup Cuttings
3-S	Plastic Coated Cups
4-S	Polycoated Bleached Kraft—Unprinted
5-S	Polycoated Bleached Kraft—Printed
6-S	Polycoated Milk Carton Stock
7-S	Polycoated Diaper Stock
8-S	Polycoated Boxboard Cuttings
9-S	Waxed Boxboard Cuttings
10-S	Printed and/or Unprinted Bleached Sulphate Containing Foil
11-S	Waxed Corrugated Cuttings
12-S	Wet Strength Corrugated Cuttings
13-S	Asphalt Laminated Corrugated Cuttings
14-S	Beer Carton Scrap
15-S	Contaminated Bag Scrap
16-S	Insoluble Glued Free Sheet Paper and/or Board (IGS)
17-S	White Wet Strength Scrap
18-S	Brown Wet Strength Scrap
19-S	Printed and/or Colored Wet Strength Scrap
20-S	File Stock
21-S	New Computer Print Out
22-S	Ruled White
23-S	Flyleaf Shavings Containing Hot Melt Glue
24-S	Carbon Mix
25-S	Books with Covers
26-S	Unsorted Tabulating Cards
27-S	Colored Tabulating Cards
28-S	Carbonless Treated Ledger
29-S	(Not currently in use)
30-S	Plastic Windowed Envelopes
31-S	Textile Boxes
32-S	Printed TMP
33-S	Unprinted TMP
34-S	Manila Tabulating Cards
35-S	Sorted Colored Ledger

Glossary of Paper Stock Terms for Both Domestic and Export Transactions

The following is a glossary of paper stock terms used within section VI, Grade Definitions, of the Guidelines for Paper Stock: PS-2005, for both Domestic and Export Transactions. These terms are not intended as a dictionary, but as a guide to help the Circular user better understand specific grade definitions as used in the recovered paper industry.

ADHESIVES: Bonding substances that are non-water soluble are considered contaminants in pulp subs, groundwood and deinking grades.

BEATER-DYED: Paper dyed or colored during the paper manufacturing process.

BLEACHED: Paper that has been whitened by chemicals.

BOARDS: Paperboard 0.006 inch or thicker.

BOGUS: Paper of inferior quality to a standard grade.

BOXBOARD: Paperboard made from mixed papers having folding properties and thickness used to manufacture folding or set-up boxes.

CHEMICAL WOOD-FIBER PULP: Generic for cellulose fiber isolated and purified by a chemical digestive process.

CHIPBOARD: Low density paperboard with 0.006 thickness or heavier.

COATINGS: A layer of adhesives, clays, varnish or any barrier applied to paper.

CONTAINERBOARD: Linerboard and corrugated medium used to manufacture shipping containers.

CORES: Paper tubes on which rolls of paper may be wound for shipment.

CORRUGATED CONTAINERS: Shipping containers made with kraft paper linerboard and corrugated medium.

CUTTINGS: Paper stock by-product of paper converting operations.

FILLER/FILLED: Denotes papers that have minerals (clays or other pigments) added for improving quality or color.

FLYLEAF/SHAVINGS: Trim scrap from printing operations.

FREESHEET: Paper that contains less than 10% groundwood fiber (synonym: groundwood-free).

GROUNDWOOD: Paper made with fibers produced without chemical pulping.

GILT: Metallic (gold or silver) inks used in printing.

HOGGED: Paper that has been mechanically torn or ripped to reduce its original size.

HOT-MELT: A type of glue or adhesive applied while hot/warm. Considered a contaminant in some grades.

IMPACT (PRINTING): A paper printing process that physically applies ink to the paper surface.

INSOLUBLE GLUES: Glues that won't dissolve (break down) in water.

JUTE: Strong, long-fibered pulp made from hemp.

KRAFT: Paper made from sulfate pulp (synonyms: brown and strong).

LAMINATED: Paper manufactured by fusing one or more layers of paper together.

LINERBOARD: Outside layers of a combination board used to manufacture corrugated shipping containers.

MANIFOLD: May denote continuous forms or business forms with several parts (may be interleaved with carbon paper or be carbonless papers).

MEDIUM: The inner corrugated fluted material used to manufacture corrugated shipping containers.

NON-IMPACT: Papers having printing images formed without impact.

OFF-SHORE/ASIAN: Denotes corrugated shipping containers manufactured overseas and containing bogus liners or medium. (Color is somewhat lighter/more yellow than North American produced materials).

PAPERBOARD: Denotes paper products used for packaging (corrugated boxes, folding cartons, set-up boxes, etc.).

ROTOGRAVURE: A paper printing (intaglio) process typically used to create the highest quality of smoothness on coated and uncoated papers. Excess quantities are considered an out-throw in grades #7, #8, and #9.

SECTIONS: Unbound, unused printed material with full ink coverage.

SHAVINGS: Trim from converting and bindery operations.

SIGNATURES: A section of book obtained by folding a single sheet of printing paper.

SLABBED: Type of paper stock normally generated by cutting rolls.

SULFITE: Papers and boards made from pulps made from an acid process.

SULPHATE: Papers and boards made from alkaline processed pulps.

TEST LINER: Liners, which are the outer ply of any kind of paperboard, containing 100% recycled material.

TMP: Thermomechanical pulp.

TREATED: Paper manufactured with additives.

TRIM: Cuttings of paper stock generated at converting or bindery operations which normally have little or no printing.

ULTRA-VIOLET (UV) INKS/COATINGS: Papers having inks or coatings dried by utilizing an ultraviolet radiation method. Considered a contaminant in deinking grades.

WET STRENGTH: Papers that have been treated with a moisture-resistant chemical that inhibits pulping.

Guidelines for Paper Stock: PS-2006—Export Transactions

Paper Stock: Export Transactions

Preamble

These Guidelines apply to paper stock for repulping only and are for use in export transactions from the U.S. and Canada.

Basic to the success of any Buyer-Seller relationship is an atmosphere of "good faith."

In keeping with this, the following underlying principles have been accepted as necessary to the maintenance of amicable international dealings:

1. Seller must use due diligence to ascertain that shipments consist of properly packed paper stock and that shipment is made during the period specified.
2. Arbitrary rejections, deductions and cancellations by the Buyer are counter to acceptable good trade practice.
3. Seller shall deliver the quality of paper stock agreed upon but shall not be responsible for its use or the paper or paperboard manufactured therefrom.
4. Unless otherwise mutually agreed to by both Buyer-Seller, all transactions shall conform to the trade practice outlined in these Guidelines and the grade descriptions shown in the PSI Standards and Practices Circular.

I. The Purchase Agreement

Each transaction covering the purchase or sale of paper stock should be confirmed in writing and include agreement on the following items:

1. Quantity

Where possible, the quantity shall always be specified in terms of a definite number of metric tons of 2,204.6 pounds each, or short tons of 2,000 pounds each.

- a. If the quantity is specified in tons, the order shall be considered completed when aggregate shipments are 5% under or over the quantity ordered (unless Letter of Credit restrictions apply).
- b. If the quantity is specified in truckload and/or container load, this is defined as full visible capacity but not in excess of legal or freight line limits.

2. Grades

Where possible, each grade purchased shall be specified in accordance with the grade as defined in the latest Paper Stock Industries Chapter Standards and Practices Circular. Any deviation from the grades listed in the Paper Stock Industries Chapter Standards and Practices Circular should be specified and agreed to by both parties.

3. Packing

Whether units are to be bales, skids, rolls, pallets, boxes, or bundles should be stated. Where possible, approximate sizes or weights should be specified.

4. Price

The price agreed upon shall be clearly stated in U.S. dollars and cents.

5. Transportation Charges

These shall be clearly indicated with the use of the following phrases such as: "F.A.S. harbor," or "C&F," "C.I.F.," or "container yard" (CY), "ex-ship," "ex-frontier."

6. Shipping

- a. Instructions: Should be provided by Buyer at time of order. Information should include: consignee; party to be notified; identification marks; insurance information; and freight payment information.
- b. Time Frame—Shipment to be completed within 30 days of receipt of order, Letter of Credit and instruction information, unless otherwise specified.

7. Terms

Payment shall be made in U.S. dollars by means of an irrevocable Letter of Credit confirmed by a U.S. bank.

8. Method of Invoicing

Invoicing instructions shall be clearly stated in Letter of Credit.

II. Fulfillment by the Seller

Practices of the Seller shall be in accordance with the following:

1. Acceptance

All orders shall be confirmed in writing.

2. Grading

Paper stock which is sold under the grade names appearing in the PSI Standards and Practices Circular shall be warranted to conform to those grading definitions.

3. Baling

Each bale must be secured with a sufficient number of bale ties drawn tight to insure a satisfactory delivery.

4. Tare

Sides and headers must be adequate to make a satisfactory delivery of the bale but must not be excessive. The weight of skids or iron cores should be deducted from a gross invoice weight.

5. Loading

Paper stock shall be loaded as follows:

- a. Before they are loaded, cars, trucks, and containers shall be in sound condition and free from odors and objectionable materials.
- b. Grades should be loaded in straight loads unless otherwise agreed to. When two or more grades are included in the same shipment, units of each grade should be kept together in a separate part of the container.

- c. Paper stock must be loaded in a manner that will minimize shifting and breakage. Excessive breakage prior to unloading may be cause for a claim.

6. Shipping Notice

A shipping notice or an invoice showing the date of shipment, container number and net weight of contents shall be mailed or telexed to the Buyer within 72 hours of shipment. On request, a bill of lading shall be furnished.

7. Invoicing

Invoicing should conform to instructions on the order and include the following data:

- a. Date of Shipment
- b. Container Number
- c. Ship Name
- d. Bill of Lading Number
- e. Customer's Order Number
- f. Shipper's Invoice Number
- g. Number of Bales, Rolls, etc.
- h. Quantity and Grade
- i. Price and Extension
- j. Terms

8. Claims

When a Seller has been notified of a claim, within five business days he/she must advise the Buyer as to which of the following procedures he/she has decided upon:

- a. Require the opportunity to inspect the quality of the material in question within five business days and during such period give Buyer final disposition.
- b. Agree with the Buyer to a compromise acceptance and settlement.
- c. Request the Buyer agree to submit the claim to arbitration.

III. Fulfillment by the Buyer

The practice of the Buyer shall be in accordance with the following:

1. Unloading

After arrival of the shipment, the Buyer is to inspect the contents so far as possible while it is still loaded.

If the shipment appears to be in accordance with the order and shipping notice, the Buyer shall proceed with the unloading.

If the shipment does not appear to be in accordance with the order and shipping notices, or if the quality of the stock is not in accordance with specifications agreed to, the Buyer shall immediately notify the Seller before unloading.

If during the process of unloading, any portion of the shipment not visible in the original inspection is not in accordance with specifications, shipping notice and order, that portion shall be set aside and the Seller immediately notified.

If at any time within 21 days after receipt of shipment, the Buyer, upon opening the bales finds objectionable materials heretofore not visible, he shall immediately notify the Seller

In the event of any claim, the Buyer shall use due diligence to protect all controversial paper stock from external deterioration or contamination.

2. Claims Other Than Quality

The Buyer shall within 10 days of unloading notify the Seller of any necessary changes and shall furnish detailed information with regard to these changes.

3. Rejection

In the event of a rejection, the Buyer shall be responsible for any paper stock used by the Buyer and the freight thereon, other than such quantity as may be considered reasonable for laboratory sampling or testing purposes. The Buyer must protect the shipment from weather or any other elements until the claim is settled.

IV. Miscellaneous Practices

1. Ownership

If the shipment is purchased on a "delivered destination" basis, and is in accordance with the agreement covering the transaction, it remains the property of the Seller until it is delivered to the Buyer by carrier.

2. Demurrage Charges

- a. Any demurrage accrued on a shipment due to the failure of the Seller to ship in accordance with the order, except with respect to quality, is the liability of the Seller.
- b. In the event that a rejection for quality stands, any demurrage accruing on the shipment prior to notification to the Seller shall be the Buyer's liability.
- c. In the event that negotiation of substantiated rejection for quality results in agreement by the Buyer to accept the shipment, then only the demurrage, following notification of the rejection—and including 24 hours after the agreement—becomes the liability of the Seller. Demurrage accruing prior to and including the day of notification becomes the liability of the Buyer.

3. Switching and Freight charges

Any extra switching or excess freight charges accruing on a shipment due to the failure of the Seller to protect the agreed upon minimum rate or to ship in accordance with the agreement is the liability of the Seller.

4. Weight Discrepancies

No debits, credits or adjustments shall be issued on any shipment of paper stock when the weight variation is 2% or less.

In the event that a discrepancy exceeds those mentioned above as "allowable," the Buyer and Seller shall exchange copies of certified weight in containers. In the event that both parties have such records, and errors cannot be determined, it is recommended that the weight closest to the public carrier's scale weight shall be assumed to be correct. Buyer and Seller should agree on the location of the public carrier's scale prior to shipment. In the absence of such records on the part of one of the parties, the records of the other party shall govern.

5. Moisture Content

All paper stock must be packed air dry. A moisture content of 12% is deemed to be air dry.

Where excess moisture is present in the shipment, the Buyer has the right to request an adjustment. Whenever possible, such adjustment shall be made on an average air dry basis.

6. Replacement of Shipment

In the event that any shipment is rejected due to quality:

Whether or not the shipment is to be replaced is to be decided by mutual agreement between Buyer and Seller.

7. Promptness of Shipment

- a. In the event that Buyer causes shipment to be postponed:

On instructions of the Buyer, the Seller shall have the option of extending the time limit of the order by the same number of days of the postponement, or of canceling that portion of the order on which shipment was postponed. Seller shall promptly notify Buyer of option selected.

- b. In the event that Buyer causes shipment to be postponed:

On instructions of the Seller, the Buyer shall have the option of extending the time limit of the order by the same number of days of the postponement, or of canceling that portion of the order on which shipment was postponed. Buyer shall promptly notify Seller of option selected.

8. Outthrows

Outthrows shall be understood to be all papers that are so manufactured or treated or are in such form as to be unsuitable for consumption as the grade specified.

9. Prohibitive Materials

- a. Any materials which, by their presence in a packing of paper stock, in excess of the amount allowed, make the packing unusable as the grade specified.
- b. Any materials which, by their presence in a package of paper stock, pose a risk of damage to the equipment.

Note: In connection with Items 8 and 9, a material can be classified as an "Outthrow" in one grade and as a "Prohibitive Material" in another grade. Carbon paper, for instance, is "UNSUITABLE" in Mixed Paper and is, therefore, classified as an "Outthrow"; whereas it is "UNUSABLE" in White Ledger and in this case classified as a "Prohibitive Material."

V. Arbitration

In the event of a total disagreement between Buyer and Seller, the dispute should be submitted to ISRI arbitration.

In all cases, the cost of arbitration shall be borne by the party found to be at fault, or split in the event of compromise, as determined by the arbitrators.

VI. Grade Definitions

The definitions which follow describe grades as they should be sorted and packed. CONSIDERATION SHOULD BE GIVEN TO THE FACT THAT PAPER STOCK AS SUCH IS A SECONDARY MATERIAL PRODUCED MANUALLY AND MAY NOT BE TECHNICALLY PERFECT. Definitions may not specifically address all types of processes used in the manufacture or recycling of paper products. Specific requirements should be discussed between Buyer and Seller during negotiations.

Outthrows

The term "Outthrows" as used throughout this section is defined as "all papers that are so manufactured or treated or are in such a form as to be unsuitable for consumption as the grade specified."

Prohibitive Materials

The term "Prohibitive Materials" as used throughout this section is defined as:

- a. Any materials which by their presence in a packing of paper stock, in excess of the amount allowed, will make the packaging unusable as the grade specified.
- b. Any materials that may be damaging to equipment.

Note: The maximum quantity of "Outthrows" indicated in connection with the following grade definitions is understood to be the TOTAL of "Outthrows" and "Prohibitive Materials."

A material can be classified as an "Outthrow" in one grade and as a "Prohibitive Material" in another grade. Carbon paper, for instance, is "UNSUITABLE" in Mixed Paper and is, therefore, classified as an "Outthrow"; whereas it is "UNUSABLE" in White Ledger and in this case is classified as a "Prohibitive Material."

Glossary of Terms

A supplemental glossary of paper stock terms is located on page 29. The purpose of this limited list of terms is to help the user better understand specific grade definitions contained within this Circular.

(1) Soft Mixed Paper

Consists of a mixture of various qualities of paper not limited as to type of baling or fiber content.

Prohibitive Materials may not exceed	2%
Total Outthrows may not exceed	10%

(2) Mixed Paper

Consists of a clean, sorted mixture of various qualities of paper containing less than 10% of groundwood content.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	3%

(3) (Grade not currently in use)**(4) Boxboard Cuttings**

Consists of new cuttings of paperboard used in the manufacture of folding cartons, set-up boxes, and similar boxboard products.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(5) Mill Wrappers

Consists of paper used as outside wrap for rolls, bundles, or skids of finished paper.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	3%

(6) News

Consists of newspaper as typically generated from news drives and curbside collections.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	5%

(7) News, De-ink Quality (#7 ONP)

Consists of sorted, fresh newspapers, not sunburned, containing not more than the normal percentage of rotogravure and colored sections. May contain magazines.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/4 of 1%

(8) Special News, De-ink Quality (#8 ONP)

Consists of sorted, fresh newspapers, not sunburned, free from magazines, white blank, pressroom over-issues, and paper other than news, containing not more than the normal percentage of rotogravure and colored sections. This grade must be tare-free.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/4 of 1%

(9) Over-Issue News (OI or OIN)

Consists of unused, overrun newspapers printed on newsprint, or securely tied in bundles, containing not more than the normal percentage of rotogravure and colored sections.

Prohibitive Materials	None permitted
Total Outthrows	None permitted

(10) Magazines (OMG)

Consists of coated magazines, catalogues, and similar printed materials. May contain a small percentage of uncoated news-type paper.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	3%

(11) Corrugated Containers (OCC)

Consists of corrugated containers having liners of either test liner, jute, or kraft.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	5%

(12) Double Sorted Corrugated (DS OCC)

Consists of double sorted corrugated containers, generated from supermarkets and/or industrial or commercial facilities, having liners of test liner, jute, or kraft. Material has been specially sorted to be free of boxboard, off-shore corrugated, plastic, and wax.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(13) New Double-Lined Kraft Corrugated Cuttings (DLK)

Consists of new corrugated cuttings having liners of either test liner, jute, or kraft. Treated medium or liners, insoluble adhesives, butt rolls, slabbed or hogged medium, are not acceptable in this grade.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(14) Fiber Cores

Consists of paper cores made from either chipboard and/or linerboard, single or multiple plies. Metal or plastic end caps, wood plugs, and textile residues are not acceptable in this grade.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	5%

(15) Used Brown Kraft

Consists of used brown kraft bags free of objectionable liners and original contents.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(16) Mixed Kraft Cuttings

Consists of new brown kraft cuttings, sheets and bag scrap free of stitched paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(17) Carrier Stock

Consists of printed or unprinted, unbleached new beverage carrier sheets and cuttings. May contain wet strength additives.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(18) New Colored Kraft

Consists of new colored kraft cuttings, sheets and bag scrap, free of stitched papers.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(19) Grocery Bag Scrap (KGB)

Consists of new brown kraft bag cuttings, sheets and misprint bags.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(20) Kraft Multi-Wall Bag Scrap

Consists of new brown kraft multi-wall bag cuttings, sheets, and misprint bags, free of stitched papers.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(21) New Brown Kraft Envelope Cuttings

Consists of new unprinted brown kraft envelopes, cuttings or sheets.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(22) Mixed Groundwood Shavings

Consists of trim of magazines, catalogs and similar printed matter, not limited with respect to groundwood or coated stock, and may contain the bleed of cover and insert stock as well as beater-dyed paper and solid color printing.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(23) Telephone Directories

Consists of clean telephone directories printed for or by telephone directory publishers.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(24) White Blank News (WBN)

Consists of unprinted cuttings and sheets of white newsprint or other uncoated white groundwood paper of similar quality.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(25) Groundwood Computer Printout (GW CPO)

Consists of groundwood papers which are used in forms manufactured for use in data processing machines. This grade may contain colored stripes and impact or nonimpact (e.g., laser) computer printing.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(26) Publication Blanks (CPB)

Consists of unprinted cuttings or sheets of white coated or filled groundwood content paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(27) Flyleaf Shavings

Consists of trim from magazines, catalogs and similar printed matter. May contain the bleed of cover and insert stock to a maximum of 10% dark colors. Beater-dyed paper may not exceed 2%. Shavings of novel news or newsprint grades may not be included in this grade.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(28) Coated Soft White Shavings (SWS)

Consists of unprinted, coated, and uncoated, shavings and sheets of white groundwood-free printing paper. May contain a small percentage of groundwood.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(29) (Grade not currently in use)**(30) Hard White Shavings (HWS)**

Consists of shavings or sheets of unprinted, untreated white groundwood-free paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(31) Hard White Envelope Cuttings (HWEC)

Consists of groundwood-free cuttings, shavings or sheets of unprinted, untreated and uncoated white envelope paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(32) (Grade not currently in use)**(33) New Colored Envelope Cuttings**

Consists of groundwood-free cuttings, shavings, or sheets of untreated, uncoated bleachable colored envelope paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(34) (Grade not currently in use)**(35) Semi Bleached Cuttings**

Consists of sheets and cuttings of unprinted, untreated, groundwood-free paper such as file folder stock, manila tabulating card trim, untreated milk carton stock, or manila tag.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(36) Grade not currently in use)**(37) Sorted Office Paper (SOP)**

Consists of paper, as typically generated by offices, containing primarily white and colored groundwood-free paper, free of unbleached fiber. May include a small percentage of groundwood computer printout and facsimile paper.

Prohibitive Materials	2%
Total Outthrows may not exceed	5%

(38) Grade not currently in use)**(39) Manifold Colored Ledger (MCL)**

Consists of sheets, shavings, and cuttings of industrially-generated printed or unprinted colored or white groundwood-free paper. All stock must be uncoated and free of nonimpact printing. A percentage of carbonless paper is allowable.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(40) Sorted White Ledger (SWL)

Consists of uncoated, printed or unprinted sheets, shavings, guillotined books, and cuttings of white groundwood-free ledger, bond, writing, and other paper which has similar fiber and filler content.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(41) Manifold White Ledger (MWL)

Consists of sheets, shavings, and cuttings of industrially-generated printed or unprinted white groundwood-free paper. All stock must be uncoated and free of nonimpact printing.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(42) Computer Printout (CPO)

Consists of white groundwood-free paper in forms manufactured for use in data processing machines. This grade may contain colored stripes and impact or non-impact (e.g. laser) computer printing, and may contain no more than 5% groundwood in the pack. All stock must be untreated and uncoated.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(43) Coated Book Stock (CBS)

Consists of coated groundwood-free paper, printed or unprinted in sheets, shavings, guillotined books and cuttings. A reasonable percentage of paper containing fine groundwood may be included.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(44) Coated Groundwood Sections (CGS)

Consists of printed, coated groundwood paper in sheets, sections, shavings or guillotined books. This grade may not include news quality groundwood paper.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	2%

(45) Printed Bleached Board Cuttings

Consists of groundwood-free printed bleached board cuttings, free from misprint sheets, cartons, wax, greaseproof lamination, gilt, and inks, adhesives or coatings that are insoluble.

Prohibitive Materials may not exceed	1/2 of 1%
Total Outthrows may not exceed	2%

(46) Misprinted Bleached Board

Consists of groundwood-free misprint sheets and cartons of bleached board, free from wax, greaseproof lamination, gill, and inks, adhesives or coatings that are insoluble.

Prohibitive Materials may not exceed	1%
Total Outthrows may not exceed	2%

(47) Unprinted Bleached Board

Consists of groundwood-free unprinted, untreated bleached board cuttings, sheets or rolls, free from wax, greaseproof lamination and adhesives or coatings that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(48) #1 Bleached Cup Stock (#1 Cup)

Consists of untreated cuttings or sheets of coated or uncoated cup base stock. Cuttings with slight bleed may be included. Must be free of wax, poly, and other coatings that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(49) #2 Printed Bleached Cup Stock (#2 Cup)

Consists of printed, untreated formed cups, cup die cuts, and misprint sheets of coated or uncoated cup base stock. Glues must be water soluble. Must be free of wax, poly, and other coatings that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

(50) Unprinted Bleached Plate Stock

Consists of groundwood-free bleached coated or uncoated, untreated and unprinted plate cuttings and sheets.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1/2 of 1%

(51) Printed Bleached Plate Stock

Consists of groundwood-free bleached coated or uncoated, untreated printed plates and sheets. Must be free of coatings or inks that are insoluble.

Prohibitive Materials	None permitted
Total Outthrows may not exceed	1%

Specialty Grades

The grades listed below are produced and traded in carload and truckload quantities throughout the United States, and because of certain characteristics (i.e., the presence of wet strength, polycoatings, plastic, foil, carbon paper, hot melt glue), are not included in the regular grades of paper stock. However, it is recognized that many mills have special equipment and are able to utilize large quantities of these grades. Since many paper mills around the world do use these specialty grades, they are being listed with appropriate grade numbers for easy reference.

The Paper Stock Industries Chapter of ISRI is not establishing specific specifications, which would refer to such factors as the type of wet strength agent used, the percentage of wax, the amount of polycoating, whether it is on top of or under the printing, etc. The specification for each grade should be determined between Buyer and Seller, and it is recommended that purchase be made based on sample.

These specialty grades are as follows:

1-S	White Waxed Cup Cuttings
2-S	Printed Waxed Cup Cuttings
3-S	Plastic Coated Cups
4-S	Polycoated Bleached Kraft-Unprinted
5-S	Polycoated Bleached Kraft-Printed
6-S	Polycoated Milk Carton Stock
7-S	Polycoated Diaper Stock
8-S	Polycoated Boxboard Cuttings
9-S	Waxed Boxboard Cuttings
10-S	Printed and/or Unprinted Bleached Sulphate Containing Foil
11-S	Waxed Corrugated Cuttings
12-S	Wet Strength Corrugated Cuttings
13-S	Asphalt Laminated Corrugated Cuttings
14-S	Beer Carton Scrap
15-S	Contaminated Bag Scrap
16-S	Insoluble Glued Free Sheet Paper and/or Board (IGS)
17-S	White Wet Strength Scrap
18-S	Brown Wet Strength Scrap
19-S	Printed and/or Colored Wet Strength Scrap
20-S	File Stock
21-S	New Computer Print Out
22-S	Ruled White
23-S	Flyleaf Shavings Containing Hot Melt Glue
24-S	Carbon Mix
25-S	Books with Covers
26-S	Unsorted Tabulating Cards
27-S	Colored Tabulating Cards
28-S	Carbonless Treated Ledger
29-S	(Not currently in use)
30-S	Plastic Windowed Envelopes
31-S	Textile Boxes
32-S	Printed TMP
33-S	Unprinted TMP
34-S	Manila Tabulating Cards
35-S	Sorted Colored Ledger

Guidelines for Plastic Scrap: P-2006

Baled Recycled Plastic Scrap Commercial Guidelines

General Information

Commercial Guidelines for Baled Recycled Plastic Scrap were developed to provide industry-wide quality standards. These standards will facilitate commodity trading of these materials. They will also focus suppliers of such material on the quality requirements of their customers.

Product

These guidelines are designed with the potential for dealing with all recycled plastic in bale form. Initial specifications refer only to bottles. The code framework allows for generation of guidelines for all types of plastic packaging materials (including rigids and flexibles) with room for expansion to other plastic products and resins including those which are used to produce durable goods. Guidelines for those products may be added at a later date.

Codes

Codes for baled recycled plastics consist of a prefix letter, three digits and two suffix letters. The prefix letter "P" precedes all codes and designates "plastic" material. The first digit corresponds to the SPI resin identification code system and designates the primary plastic material. The second digit describes the plastic product category. The third digit defines the color/appearance of the product. The first suffix letter indicates the type of recycled plastic. The second suffix letter indicates the source of the recycled plastic product. (See Table 1.)

Bale Density

Bales shall be compressed to a minimum density of 10 pounds per cubic foot and a maximum density to be determined by individual contract between Buyer and Seller. Increased density may improve transportation efficiency, but over-compression may adversely affect the ability of a Buyer to separate, sort, and reprocess the material.

Bale Tying Material

Bale wires, ties, or straps shall be made of non-rusting or non-corroding material.

Bale Integrity

Bale integrity must be maintained through loading, shipping, handling, and storage. Distorted or broken bales are difficult to handle. They are unacceptable and may result in downgrading, rejection, or charge back.

Allowable Contamination

Unspecified materials must not exceed 2% of total bale weight. Bales which contain over 2% will be subjected to reduction in the contracted price of the material as well as charges for disposal of the contaminants. The reduced percentage will vary depending upon the amount and type of contamination. Quality of the baled plastic is the primary factor which determines the value.

Prohibited Material

Certain materials are understood to be specified as "prohibited." Such materials will render the bale "non-specification" and may cause some customers to reject the entire shipment. These may include plastic materials which have a deleterious effect on each other when reprocessed, and materials such as agricultural chemicals, hazardous materials, flammable liquids and/or their containers, and medical waste.

Liquids

Plastic containers/materials should be empty and dry when baled. The bale should be free of any free flowing liquid of any type.

General

Shipments should be essentially free of dirt, mud, stones, grease, glass, and paper. The plastic must not have been damaged by ultraviolet exposure. Every effort should be made to store the material above ground and under cover. A good faith effort on the part of the supplier will be made to include only rinsed bottles which have closures removed.

Definitions for Plastic Materials

Rigid Plastic Container

A package (formed or molded container) which maintains its shape when empty and unsupported.

Plastic Bottle

A rigid container which is designed with a neck that is smaller than the body. Normally used to hold liquids and emptied by pouring.

Plastic Film

A thin flexible sheet which does not hold a particular shape when unsupported.

Recycled Plastic

Plastics composed of either post-consumer or recovered material or both.

Recovered Plastic

Plastic materials which have been recovered or diverted from the solid waste stream. Does not include materials generated from and commonly reused within an original manufacturing process.

Post-Consumer

Products generated by a business or consumer that have served their intended end use and have been separated or diverted from the solid waste stream for the purpose of recycling.

Baled Recycled Plastic Commercial Guidelines Coding System

P O O O X X

The coding system for baled recycled plastic consists of a three-digit number with a prefix letter "P" and a two-letter suffix.

The prefix "P" designates the category of Plastics and differentiates the code from similar codes for metals and other materials.

The first digit corresponds to the SPI resin identification code system and designates the primary plastic material.

The second digit describes the plastic/product category.

The third digit defines the color/appearance of the product.

The first suffix letter indicates the type of recycled plastic.

The second suffix letter indicates the source of the recycled plastic product.

Coding Key:

P	O	O	O	X	X
Plastic	Resin Code	Product	Color	Type	Source
	0 Mixed Resins (1-7)				
	1 PET	0-Bottles	0-Mixture	P-Post Consumer	M-Municipal
	2 HDPE	1-Rigids	1-Natural		
	3 PVC			R-Recovered	I-Industrial
	4 LDPE	2-Films	2-Pigment/Dyed		
	5 PP				C-Commercial
	6 PS	3-9 To be assigned	3-9 Designated within each category		S-Institutional
	7 Other				
	8 To be assigned				
	9 To be assigned				

Baled Plastic Material Identification Codes

Series	Code	Resin	Categories	Series	Code	Resin	Categories
P-100 Series-PET	P-100	PET	Mixed Bottles	P-500 Series-PP	P-500	PP	Mixed Bottles
	P-101	PET	Clear Soda Bottles		P-501	PP	Natural Bottles
	P-102	PET	Green Soda Bottles		P-502	PP	Pigmented Bottles
	P-103	PET	Mixed Clear & Green Soda Bottles	P-600 Series-PS	P-600	PS	Mixed Bottles
	P-104	PET	Custom Bottles		P-601	PS	Natural Bottles
P-110	PET	Mixed Rigid Containers	P-602		PS	Pigmented Bottles	
P-200 Series-HDPE	P-200	HDPE	Mixed Bottles	P-700 Series Other/Code 7			
	P-201	HDPE	Natural Bottles	P-700	OTHER	Mixed Bottles	
	P-202	HDPE	Pigmented Bottles	P-701	OTHER	Natural Bottles	
P-300 Series-PVC	P-300	PVC	Mixed Bottles	P-702	OTHER	Pigmented Bottles	
	P-301	PVC	Natural Bottles	P-000 Series-Mixed resins (Codes 1-7)			
	P-302	PVC	Pigmented Bottles	P-000	MIXED	Mixed Bottles	
P-400 Series-LDPE	P-400	LDPE	Mixed Bottles	P-001	MIXED	Natural Bottles	
	P-401	LDPE	Natural Bottles	P-002	MIXED	Pigmented Bottles	
	P-402	LDPE	Pigmented Bottles				

NOTE: The existence of a code category does not imply the existence of a market for the material. These are representative code categories. Other categories may be developed as the need arises.

Commercial Guideline Baled Recycled Plastic Standard P-100

Resin: PET MIXED
Product: Bottles Only
Category: Mixed soft drink, liquor, edible oil, etc. bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
 No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-101

Resin: PET CLEAR
Product: Bottles Only
Category: Beverage containers only (1, 2, 3 liter, 16 oz. soft drink bottles)
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-102

Resin: PET GREEN
Product: Bottles Only
Category: Beverage containers only (1, 2, 3 liter, 16 oz. soft drink bottles)
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles

Commercial Guideline Baled Recycled Plastic Standard P-103

Resin: PET CLEAR and GREEN
Product: Bottles Only
Category: Beverage containers only (1, 2, 3 liter, 16 oz. soft drink bottles)
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-104

Resin: PET CUSTOM
Product: Bottles and Jars Only
Category: Mixed liquor, edible oil, peanut butter, etc. bottles/jars
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-110

Resin: PET MIXED
Product: Rigid Containers
Category: Mixed bottles, jars, tubs, trays, etc.
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-200

Resin: HDPE MIXED
Product: Bottles Only
Category: Mixed household HDPE bottles (detergent, shampoos, household products, milk, etc.)

Type:**Source:**

Bale Properties: Dimension: 72" maximum

Bulk Density: 10 lbs/cu ft. minimum

Strapping: Non-rusting material

Integrity: Must be maintained through shipping, unloading & storage

Contamination: Total allowable: 2%

Type: Non-specified plastic or non-plastic material

Dirt: Essentially free of dirt, mud & stones

Haz. Mat.: No hazardous or medical waste

Moisture: No free flowing liquid

Storage: Outdoor: <1 month unless covered with UV protective materials

General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-201

Resin: HDPE NATURAL
Product: Bottles Only
Category: Milk, water, and juice (quart, ½ gallon, and 1 gallon bottles)

Type:**Source:**

Bale Properties: Dimension: 72" maximum

Bulk Density: 10 lbs/cu ft. Minimum

Strapping: Non-rusting material

Integrity: Must be maintained through shipping, unloading & storage

Contamination: Total allowable: 2%

Type: Non-specified plastic or non-plastic material

Dirt: Essentially free of dirt, mud & stones

Haz. Mat.: No hazardous or medical waste

Moisture: No free flowing liquid

Storage: Outdoor: <1 month unless covered with UV protective materials

General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-202

Resin: HDPE PIGMENTED
Product: Bottles Only
Category: Mixed pigmented household HDPE bottles (detergent, shampoo, household products, etc.)

Type:**Source:**

Bale Properties: Dimension: 72" maximum

Bulk Density: 10 lbs/cu ft. minimum

Strapping: Non-rusting material

Integrity: Must be maintained through shipping, unloading & storage

Contamination: Total allowable: 2%

Type: Non-specified plastic or non-plastic material

Dirt: Essentially free of dirt, mud & stones

Haz. Mat.: No hazardous or medical waste

Moisture: No free flowing liquid

Storage: Outdoor: <1 month unless covered with UV protective materials

General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-300

Resin: PVC MIXED
Product: Bottles Only
Category: Mixed clear and pigmented bottles

Type:**Source:**

Bale Properties: Dimension: 72" maximum

Bulk Density: 10 lbs/cu ft. minimum

Strapping: Non-rusting material

Integrity: Must be maintained through shipping, unloading & storage

Contamination: Total allowable: 2%

Type: Non-specified plastic or non-plastic material

Dirt: Essentially free of dirt, mud & stones

Haz. Mat.: No hazardous or medical waste

Moisture: No free flowing liquid

Storage: Outdoor: <6 months unless covered with UV protective materials

General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-301

Resin: PVC NATURAL
Product: Bottles Only
Category: Clear Bottles

Type:**Source:**

Bale Properties: Dimension: 72" maximum

Bulk Density: 10 lbs/cu ft. minimum

Strapping: Non-rusting material

Integrity: Must be maintained through shipping, unloading & storage

Contamination: Total allowable: 2%

Type: Non-specified plastic or non-plastic material

Dirt: Essentially free of dirt, mud & stones

Haz. Mat.: No hazardous or medical waste

Moisture: No free flowing liquid

Storage: Outdoor: <6 months unless covered with UV protective materials

General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-302

Resin: PVC PIGMENTED
Product: Bottles Only
Category: Pigmented Bottles

Type:**Source:**

Bale Properties: Dimension: 72" maximum

Bulk Density: 10 lbs/cu ft. minimum

Strapping: Non-rusting material

Integrity: Must be maintained through shipping, unloading & storage

Contamination: Total allowable: 2%

Type: Non-specified plastic or non-plastic material

Dirt: Essentially free of dirt, mud & stones

Haz. Mat.: No hazardous or medical waste

Moisture: No free flowing liquid

Storage: Outdoor: <6 months unless covered with UV protective materials

General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-400

Resin: LDPE MIXED
Product: Bottles Only
Category: Mixed natural and pigmented bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-401

Resin: LDPE MIXED
Product: Bottles Only
Category: Natural Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-402

Resin: LDPE PIGMENTED
Product: Bottles Only
Category: Pigmented Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-500

Resin: PP MIXED
Product: Bottles Only
Category: Mixed natural and pigmented bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-501

Resin: PP NATURAL
Product: Bottles Only
Category: Natural Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-502

Resin: PP PIGMENTED
Product: Bottles Only
Category: Pigmented Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-600

Resin: PS MIXED
Product: Bottles Only
Category: Mixed clear and pigmented bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-601

Resin: PS NATURAL
Product: Bottles Only
Category: Clear Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-602

Resin: PS PIGMENTED
Product: Bottles Only
Category: Pigmented Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <6 months unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-700

Resin: CODE #7-OTHER MIXED
Product: Bottles Only
Category: Mixed natural and pigmented bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-701

Resin: CODE #7-OTHER NATURAL
Product: Bottles Only
Category: Natural bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-702

Resin: CODE #7-OTHER PIGMENTED
Product: Bottles Only
Category: Pigmented Bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-000

Resin: MIXED RESINS (Coded 1 through 7)-MIXED COLOR
Product: Bottles Only
Category: Natural and pigmented bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-001

Resin: MIXED RESINS (Coded 1 through 7)-NATURAL
Product: Bottles Only
Category: Natural bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu. ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Commercial Guideline Baled Recycled Plastic Standard P-002

Resin: MIXED RESINS (Coded 1 through 7)-PIGMENTED
Product: Bottles Only
Category: Pigmented bottles
Type:
Source:
Bale Properties: Dimension: 72" maximum
 Bulk Density: 10 lbs/cu ft. minimum
 Strapping: Non-rusting material
 Integrity: Must be maintained through shipping, unloading & storage
Contamination: Total allowable: 2%
 Type: Non-specified plastic or non-plastic material
 Dirt: Essentially free of dirt, mud & stones
Haz. Mat.: No hazardous or medical waste
Moisture: No free flowing liquid
Storage: Outdoor: <1 month unless covered with UV protective materials
General: Good faith effort to rinse bottles and remove closures

Guidelines for Electronics Scrap: ES-2006

Electronics Scrap

Commercial Guidelines for Electronics Scrap were developed to provide industry-wide quality standards. These standards will facilitate commodity transactions domestically and internationally. Transactions covering shipments to or from other countries may be in accordance with these standards and may be modified by mutual agreement between Buyer and Seller.

Electronic Scrap Definitions

The following E-Recycling definitions will facilitate a more consistent language for both domestic as well as international transactions.

"END-OF-LIFE ELECTRONIC PRODUCTS"

EOL Electronic Products are either obsolete for their intended purpose or no longer useful by the current user and lack any significant market value as an operational unit. These products are represented by any of the following categories of electronic products:

IT and telecommunications electronic equipment including:

- Centralized data processing:
 - Mainframes
 - Minicomputers
 - Printer units
- Personal computing:
 - Personal computers (CPU, mouse, screen and keyboard included)
 - Laptop computers (CPU, mouse, screen and keyboard included)
 - Notebook computers
 - Notepad computers
- Printers
- Copying equipment
- Electrical and electronic typewriters
- Pocket and desk calculators
- Other products and equipment for the collection, storage, processing, presentation or communication of information by electronic means
- User terminals and systems
- Facsimile
- Telex
- Telephones
 - Pay telephones
 - Cordless telephones
 - Cellular telephones
 - Answering systems
- Other products or equipment for transmitting sound, images or other information by telecommunications

Consumer electronic equipment including:

- Radio sets
- Television sets
- Video cameras
- Video recorders
- Ell-h recorders
- Audio amplifiers
- Musical instruments and other products or equipment for the purpose of recording or reproducing sound or images, including signals or other technologies for the distribution of sound and image by telecommunications

Toys, leisure and sports electronic equipment including:

- Electric trains or car racing sets
- Hand-held video game consoles
- Video games
- Computers for biking, diving, running, rowing, etc.
- Sports equipment with electric or electronic components
- Coin slot machines

Medical devices (except all implanted and infected products and radioactive components) including:

- Radiotherapy equipment
- Cardiology
- Dialysis
- Pulmonary ventilators
- Nuclear medicine
- Laboratory equipment or in-vitro diagnostics
- Analyzers
- Freezers
- Fertilization tests
- Other appliances for detecting, preventing, monitoring, treating, or alleviating illness, injury or disability

Monitoring and control instruments including:

- Smoke detectors
- Heating regulators
- Thermostats
- Measuring, weighing or adjusting appliances for household or as laboratory equipment
- Other monitoring and control instruments used in industrial installations (e.g. Irra control panels)

"E-Recycling"

E-Recycling is any process by which End-of-Life (EOL) electronic products which would otherwise become solid waste are collected, separated, reused or processed and returned to use in the form of raw materials or products.

"E-Demanufacturing"

Demanufacturing is the process of separating EOL electronic products (electronic materials) into metallic and non-metallic parts that can be reused or recycled.

"E-Dismantler"

Dismantler is a person who engages in the manual demanufacturing of EOL electronic products (electronic materials) to reuse or recycle components and commodities contained within.

"E-Dismantling"

Dismantling is the manual demanufacturing of EOL electronic products (electronic materials) to reuse or recycle components and commodities contained within.

"E-Processor"

Processor is a person who engages in the mechanical demanufacturing of EOL electronic products (electronic materials) to reuse or recycle various commodities contained within.

"E-Processing"

Processing is the mechanical demanufacturing of EOL electronic products (electronic materials) to recover various commodities contained within.

"E-Broker"

Broker is a person who engages in the buying, selling, and trading of electronic products (electronic materials) without demanufacturing.

"E-Brokering"

Brokering is the buying, selling, and trading of electronic products (electronic materials) without demanufacturing.

ELECTRONICS SCRAP METALS—ESM**ESM 1-Triple-Mixed Aluminum Breakage**

Shall consist of old sheet, cast, clips, punchings, bare wire and cable, painted sheet or cast of two or more alloys, free from excessive corrosion, oil, dirt and oxidation. Free of all fluids, gases, drosses, sweepings and hazardous materials such as mercury switches. All foreign attachments, non-metallics, iron, and extraneous materials are deductible. Should be sold on a recovery basis or by special arrangements with purchaser.

Heavy Breakage:	20%-45% Aluminum content
Medium Breakage:	46%-60% Aluminum content
Light Breakage:	61%-80% Aluminum content

ESM 2-Depot-Mixed Copper/Precious Metals

May include any whole or partially demanufactured EOL electronic products that are destined for a recycling processing operation. Material may contain printed circuit boards, ribbon cable, monitor yokes and other copper and/or precious metal bearing components. Final acceptance subject to agreement between Buyer and Seller.

ESM 3-Dallas-Shredded Copper/Precious Metals

Shredded copper/precious metal bearing from an end of life electronic products (EOLEP) shredding operation, with the majority of iron and aluminum removed. Material may contain plastic. The size will be less than one inch and the material will be free of mercury, toner, and batteries. Typically sold on a recovery basis, subject to terms between the Buyer and Seller.

ESM 4-Dallas 5-Shredded Copper/Precious Metals

Shredded copper/precious metal bearing from an end of life electronic products (EOLEP) demanufacturing operation. Material may contain large quantities of steel, aluminum and plastic. Pieces will be greater than one inch but less than 5 inches. Material will be free of mercury, toner, and batteries. Typically sold on a recovery basis, subject to terms between the Buyer and Seller.

ESM 5-Druid-Insulated Copper Wire Scrap

Shall consist of copper wire scrap with various types of insulation. To be sold on a sample or recovery basis, subject to agreement between Buyer and Seller.

ESM 6-Brant-Fragmentizer Aluminum Scrap (from EOL Electronic Products Shredders)

The material, as received, must be dry and not contain more than 3% maximum free zinc, 1% maximum free magnesium, and 1.5% maximum free iron and stainless. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, airbag canisters, or any sealed or pressurized items. Any variation to be sold by special arrangement between Buyer and Seller.

ESM 7-Marco-Recyclable Concentrates Of Shredded Mixed Nonferrous Scrap Metal in Pieces-Derived From Fragmentizers For Further Separation of Contained Materials

Shall be made up of a combination of the nonferrous metals: aluminum, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each of these metals within the nonferrous concentrate shall be subject to agreement between Buyer and Seller, may vary from shredder to shredder and may, in some cases, be zero for a particular metal. Shall be obtained by air separation, flotation, screening, eddy current, other segregation technique(s) or a combination of the same. Shall have passed one or more magnets to reduce or eliminate free iron and/or iron attachments. Shall be free of radioactive material, dross or ash. May be screened to permit description by specific size ranges. May contain high density non-metallics such as rock, glass, rubber, plastic and wood. Items of exclusion, inclusion or limitation not set out in the above specifications, such as moisture and free iron and/or attachments or the presence or absence of other metals, are subject to agreement between Buyer and Seller. Material to be traded under this guideline shall be identified as Marco with a number to follow indicating the estimated percentage nonferrous metal content of the material (e.g. Marco 63-means the material contains approximately 63% nonferrous metal content).

ELECTRONICS SCRAP GLASS—ESG**ESG 1-Jimbo-Intact CRT's**

Intact CRT's with or without the steel implosion band, Copper yoke must be removed. Material must be free of projection lenses with oil or aluminum frame.

ESG 2-Jamers-Furnace Grade CRT Glass

Furnace Grade CRT Glass-Plastic-0.50% by weight and 1/8" maximum size, Aluminum-0.25% by weight and 1/8" maximum size, Iron-5.0% by weight and 6" maximum size, Copper-2.0% by weight and 3" maximum size. Glass shall be the balance and 6" maximum in size. Any variation to be sold by special arrangement between Buyer and Seller.

ESG 3-Jacamo-Sinter Grade CRT Glass

Sinter Grade CRT Glass-Plastic-0.50% by weight and 1/8" maximum size, Aluminum-0.50% by weight and 1/8" in size, Iron-2.0% by weight and 1/8" in size, Copper-1.0% by weight and 1/8" in size. Glass to be the balance by weight and shall have a maximum size of 1/4". At least 50% of the Glass Component must be less than 1/8" in size.

ESG-CRT GLASS CULLET

CRT Glass Cullet Specifications—This specification includes CRT's that are cullet size of approximately 3 to 5 inches and prepared for glass to glass recycling.

ESG 4-CRT 1 Dirty Mixed Cullet—when the cullet contains both panel and funnel glass.

ESG 5-CRT 2 Dirty Mixed Cullet with Metals—when the cullet contains both panel and funnel glass with mixed metals.

ESG 6-CRT 3 Dirty Funnel Cullet—when the cullet is only funnel glass.

ESG 7-CRT 4 Dirty Panel Cullet—when the cullet is only panel glass.

ESG 8-CRT 5 Clean Mixed Cullet—when the panel and funnel cullet have been cleaned of all coatings, frit and metals.

ESG 9-CRT 6 Clean Funnel Cullet—when the funnel cullet has been cleaned of all coatings, frit and metals.

ESG 10-CRT 7 Clean Panel Cullet—when the panel cullet has been cleaned of all coatings, frit and metals.

Electronics Scrap Plastics—ESP

Loose Plastics—Postconsumer Sources

	ESP-1 Loose Mixed Plastics	ESP-2 Loose TV Plastics	ESP-3 Loose Computer Plastics	ESP-4 Loose Single-Resin Plastics
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Residential or commercial	Residential or commercial	Residential or commercial	Residential or commercial
Material origin	All	> 90% by weight from disassembled TV sets	> 90% by weight from disassembled PC monitors, CPUs, printers, & keyboards	> 90% by weight single target resin type
Plastic resin type	All	All	All	ABS, PC, PC/ABS, HIPS, PPE, PVC
Bulk density	Varies	Varies	Varies	Varies
Size	N/a	N/a	N/a	N/a
Shipping	Gaylords/ or larger bulk	Gaylords/ or larger bulk	Gaylords/ or larger bulk	Gaylords/ or larger bulk
Quality				
Color	All	All	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination:				
Painted/coated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Laminated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Metals	< 10% of mat'ls by weight	< 10% of mat'ls by weight	< 10% of mat'ls by weight	< 10% of mat'ls by weight
Dirt	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Total non-plastics	< 10% cumulative by weight	< 10% cumulative by weight	< 10% cumulative by weight	< 10% cumulative by weight

Loose Plastics—Postindustrial Sources

	ESP-5 Loose Mixed Plastics	ESP-6 Loose TV Plastics	ESP-7 Loose Computer Plastics	ESP-8 Loose Single-Resin Plastics
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Manufacturers, suppliers and/or molders	Manufacturers, suppliers and/or molders serving TV manufacturers	Manufacturers, suppliers and/or molders serving PC & peripherals manufacturers	Manufacturers, suppliers and/or molders
Material origin	Rejected parts, excess inventory, or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap
Plastic resin type	All	All	All	Minimum 95% by weight one of the following target resins: ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Varies	Varies	Varies	Varies
Size	N/a	N/a	N/a	N/a
Shipping	Gaylords/ or larger bulk	Gaylords/ or larger bulk	Gaylords/ or larger bulk	Gaylords/ or larger bulk
Quality				
Color	All	All	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight
Laminated	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight
Metals	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Dirt	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Total non-plastics	< 2% cumulative by weight	< 2% cumulative by weight	< 2% cumulative by weight	< 2% cumulative by weight

Baled Plastics—Postconsumer Sources

	ESP-9 Baled Mixed Plastics	ESP-10 Baled TV Plastics	ESP-11 Baled Computer Plastics	ESP-12 Baled Single-Resin Plastics
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Residential or commercial	Residential or commercial	Residential or commercial	Residential or commercial
Material origin	All	> 90% by weight from disassembled TV sets	> 90% by weight from disassembled PC monitors, CPUs, printers, & keyboards	> 90% by weight single target resin type
Plastic resin type	All	All	All	ABS, PC, PC/ABS, HIPS, PPE, PVC
Bulk density	Minimum 20 lbs/cu ft	Minimum 20 lbs/cu ft	Minimum 20 lbs/cu ft	Minimum 20 lbs/cu ft
Size	Maximum dimension 72"	Maximum dimension 72"	Maximum dimension 72"	Maximum dimension 72"
Shipping	Strapped	Strapped	Strapped	Strapped
Quality				
Color	Light or mixed	Light or mixed	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Laminated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Metals	< 10% of mat'ls by weight	< 10% of mat'ls by weight	< 10% of mat'ls by weight	< 10% of mat'ls by weight
Dirt	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Total non-plastics	< 10% cumulative by weight	< 10% cumulative by weight	< 10% cumulative by weight	< 10% cumulative by weight

Baled Plastics—Postindustrial Sources

	ESP-13 Baled Mixed Plastics	ESP-14 Baled TV Plastics	ESP-15 Baled Computer Plastics	ESP-16 Baled Single-Resin Plastics
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Manufacturers, suppliers and/or molders	Manufacturers, suppliers and/or molders serving TV manufacturers	Manufacturers, suppliers and/or molders serving PC & peripherals manufacturers	Manufacturers, suppliers and/or molders
Material origin	Rejected parts, excess inventory or other plastic scrap	Rejected parts, excess inventory or other plastic scrap	Rejected parts, excess inventory or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap
Plastic resin type	All	All	All	Minimum 95% by weight one of the following target resins: ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Minimum 8 lbs/cu ft	Minimum 8 lbs/cu ft	Minimum 8 lbs/cu ft	Minimum 8 lbs/cu ft
Size	Maximum dimension 72"	Maximum dimension 72"	Maximum dimension 72"	Maximum dimension 72"
Shipping	Strapped	Strapped	Strapped	Strapped
Quality				
Color	Light or mixed	Light or mixed	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight
Laminated	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight
Metals	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Dirt	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Total non-plastics	< 2% cumulative by weight	< 2% cumulative by weight	< 2% cumulative by weight	< 2% cumulative by weight

Shredded Plastics—Postconsumer Sources

	ESP-17 Shredded Mixed Plastics	ESP-18 Shredded TV Plastics	ESP-19 Shredded Computer Plastics	ESP-20 Shredded Sorted Plastics
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Residential or commercial	Residential or commercial	Residential or commercial	Residential or commercial
Material origin	All	> 90% by weight from disassembled TV sets	> 90% by weight from disassembled PC monitors, CPUs, printers, & keyboards	> 90% by weight single target resin type
Plastic resin type	All	All	All	Minimum 95% by weight one of the following target resins: ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Minimum 15 lbs/cu ft	Minimum 15 lbs/cu ft	Minimum 15 lbs/cu ft	Minimum 15 lbs/cu ft
Size	4" minus	4" minus	4" minus	4" minus
Shipping	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk
Quality				
Color	Light or mixed	Light or mixed	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Laminated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Metals	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Dirt	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Total Non-plastics	< 10% cumulative by weight	< 10% cumulative by weight	< 10% cumulative by weight	< 10% cumulative by weight

Shredded Plastics—Postindustrial Sources

	ESP-21 Shredded Mixed Plastics	ESP-22 Shredded TV Plastics	ESP-23 Shredded Computer Plastics	ESP-24 Shredded Sorted Plastics
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Manufacturers, suppliers and/or moulders	Manufacturers, suppliers and/or moulders serving	Manufacturers, suppliers and/or moulders serving PC TV manufacturers	Manufacturers, suppliers and/or moulders & peripherals manufacturers
Material origin	Rejected parts, excess inventory, or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap	Rejected parts, excess inventory, or other plastic scrap
Plastic resin type	All	All	All	Minimum 95% by weight one of the following target resins: ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Minimum 10 lbs/cu ft	Minimum 10 lbs/cu ft	Minimum 10 lbs/cu ft	Minimum 10 lbs/cu ft
Size	4" minus	4" minus	4" minus	4" minus
Shipping	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk
Quality				
Color	Light or mixed	Light or mixed	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight
Laminated	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight	0% of mat'ls by weight
Metals	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Dirt	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Total non-plastics	< 2% cumulative by weight	< 2% cumulative by weight	< 2% cumulative by weight	< 2% cumulative by weight

Granulated Plastics—Postconsumer Sources

	ESP-25 Granulated Mixed Plastics	ESP-26 Granulated TV Plastic	ESP-27 Granulated Computer Plastic	ESP-28 Granulated Sorted Plastic
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Residential or commercial	Residential or commercial	Residential or commercial	Residential or commercial
Material origin	All	> 90% by wt from disassembled TV sets	> 90% by wt from disassembled PC monitors, CPUs, printers, & keyboards	> 90% by weight single target resin type
Plastic resin type	All	All	All	ABS, PC, PC/ABS, HIPS, PPE, PVC
Bulk density	Minimum 25 lbs/cu ft	Minimum 25 lbs/cu ft	Minimum 25 lbs/cu ft	Minimum 25 lbs/cu ft
Size	3/8" minus	3/8" minus	3/8" minus	3/8" minus
Shipping	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk
Quality				
Color	Light or mixed	Light or mixed	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Laminated	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight	< 2% of mat'ls by weight
Metals	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight
Dirt	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight
Total non-plastics	< 1% cumulative by weight	< 1% cumulative by weight	< 1% cumulative by weight	< 1% cumulative by weight

Granulated Plastics—Postindustrial Sources

	ESP-29 Granulated Mixed Plastics	ESP-30 Granulated TV Plastic	ESP-31 Granulated Computer Plastic	ESP-32 Granulated Sorted Plastic
Material	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products	Plastic parts from electrical and electronic products
Source	Manufacturers, suppliers and/or molders	Manufacturers, suppliers and/or molders serving TV manufacturers	Manufacturers, suppliers and/or molders serving PC & peripherals manufacturers	Manufacturers, suppliers and/or molders
Material origin	Rejected parts, excess inventory or other plastic scrap	Rejected parts, excess inventory or other plastic scrap	Rejected parts, excess inventory or other plastic scrap	Rejected parts, excess inventory or other plastic scrap
Plastic resin type	All	All	All	Minimum 95% by weight one of the following target resins: ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Minimum 12 lbs/cu ft	Minimum 12 lbs/cu ft	Minimum 12 lbs/cu ft	Minimum 12 lbs/cu ft
Size	3/8" minus	3/8" minus	3/8" minus	3/8" minus
Shipping	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk	Gaylords or bulk
Quality				
Color	Light or mixed	Light or mixed	Light or mixed	Light or mixed
Haz mat	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste	No haz mat or med waste
Moisture	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid	No free-flowing liquid
Flame retardant	Fr or non-fr	Fr or non-fr	Fr or non-fr	Fr or non-fr
Contamination: Painted/coated	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight
Laminated	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight	< 0% of mat'ls by weight
Metals	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight
Dirt	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight	< 0.5% of mat'ls by weight
Total non-plastics	< 1% cumulative by weight	< 1% cumulative by weight	< 1% cumulative by weight	< 1% cumulative by weight

Cleaned Granulated Plastics with Density Separation—Postconsumer Sources

	ESP-33 Cleaned Granulate w/Density Separation
Material	Plastic parts from electrical and electronic products
Source	Residential or commercial Sources
Material origin	> 99% by weight single target resin type
Plastic resin type	ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Minimum 25 lbs/cu ft
Size	3/8" minus
Shipping	Gaylords or bulk
Quality	
Color	Light or mixed
Haz mat	No haz mat or med waste
Moisture	No free-flowing liquid
Flame retardant	Fr or non-fr
Contamination: Painted/coated	0% of mat'ls by weight
Laminated	0% of mat'ls by weight
Metals	< 0.1% of mat'ls by weight
Dirt	< 0.1% of mat'ls by weight
Total non-plastics	< 0.1% cumulative by weight

Cleaned Granulated Plastics with Density Separation—Postindustrial Sources

	ESP-34 Cleaned Granulate w/Density Separation
Material	Plastic parts from electrical and electronic products
Source	Manufacturers, suppliers and/or molders
Material origin	Rejected parts, excess inventory, or other plastic scrap
Plastic resin type	Minimum 99% by weight one of the following target resins: ABS, PC, PC/ABS, HIPS, PPE, or PVC
Bulk density	Minimum 12 lbs/cu ft
Size	3/8" minus
Shipping	Gaylords or bulk
Quality	
Color	Light or mixed
Haz mat	No haz mat or med waste
Moisture	No free-flowing liquid
Flame retardant	Fr or non-fr
Contamination: Painted/coated	0% of mat'ls by weight
Laminated	0% of mat'ls by weight
Metals	< 0.1% of mat'ls by weight
Dirt	< 0.1% of mat'ls by weight
Total non-plastics	< 0.1% cumulative by weight

Guidelines for Tire Scrap: TS-2006

Rubber From Scrap Tires

General Guidelines

Items not covered in the specifications, and any variations in the specification are subject to special arrangement between Buyer and Seller. Percentages listed below are by weight.

Definitions

Fines consist of materials that pass a 4.75 mm sieve. These materials may include rubber, fiber, inorganic and organic matter, dirt, and other non-tire materials.

Sizes will be determined by sieving. Suitable sieve sizes will be selected. Nest the sieves in order of decreasing size of opening from top to bottom and place the sample on the top sieve. Agitate the sieves by hand or by mechanical apparatus for a sufficient period so that additional sieving does not result in substantial additional material passing through the sieves.

TDM refers to tire-derived material.

Rubber Primarily Used for Civil Engineering

TDM 2-A

- All material must be smaller than 4";
- at least 90% must be smaller than 2½";
- at least 50% must be larger than 1½";
- at least 90% must be larger than ½";
- maximum of ½" protrusion of steel; and
- maximum of 1% fines.

TDM 2-B

- All material must be smaller than 4";
- at least 90% must be smaller than 2½";
- at least 50% must be larger than 1½";
- at least 90% must be larger than ½";
- at least 90% must not exceed 1" protrusion of steel; and
- maximum of 5% fines.

TDM 2-C

- All material must be smaller than 4";
- at least 90% must be smaller than 2½";
- at least 50% must be larger than 1½";
- at least 90% must be larger than ½"; and
- maximum of 5% fines.

TDM 3-A

- At least 90% must be smaller than 4";
- at least 75% must be larger than 1½";
- at least 90% must be larger than ½";
- maximum of ¾" protrusion of steel; and
- maximum of 1% fines.

TDM 3-B

- At least 90% must be smaller than 4";
- at least 75% must be larger than 1½";
- at least 90% must be larger than ½";
- at least 90% must not exceed 1" protrusion of steel; and
- maximum of 5% fines.

TDM 3-C

- At least 90% must be smaller than 4";
- at least 75% must be larger than 1½";
- at least 90% must be larger than ½"; and
- maximum of 5% fines.

TDM 5-A

- All material must be smaller than 8";
- at least 90% must be smaller than 6";
- at least 50% must be larger than 3";
- at least 90% must be larger than 1½";
- maximum of 1" protrusion of steel; and
- maximum of 1% fines.

TDM 5-B

- All material must be smaller than 8";
- at least 90% must be smaller than 6";
- at least 50% must be larger than 3";
- at least 90% must be larger than ½";
- at least 90% must not exceed 2" protrusion of steel; and
- maximum of 5% fines.

TDM 5-C

- All material must be smaller than 8";
- at least 90% must be smaller than 6";
- at least 50% must be larger than 3";
- at least 90% must be larger than ½"; and
- maximum of 5% fines.

TDM 8-A

- At least 90% must be smaller than 12";
- at least 75% must be smaller than 8";
- at least 50% must be larger than 3";
- at least 75% must be larger than 1½";
- maximum of 2" protrusion of steel; and
- maximum of 1% fines.

TDM 8-B

- At least 90% must be smaller than 12";
- at least 75% must be smaller than 8";
- at least 50% must be larger than 3";
- at least 75% must be larger than 1½";
- at least 90% must not exceed 2" protrusion of steel; and
- maximum of 5% fines.

TDM 8-C

- At least 90% must be smaller than 12";
- at least 75% must be smaller than 8";
- at least 50% must be larger than 3";
- at least 75% must be larger than 1½"; and
- maximum of 5% fines.

TDM 12-A

- At least 90% must be smaller than 18";
- at least 50% must be larger than 6";
- at least 75% must be larger than 1½";
- maximum of 2" protrusion of steel; and
- maximum of 1% fines.

TDM 12-B

- At least 90% must be smaller than 18";
- at least 50% must be larger than 6";
- at least 75% must be larger than 1½";
- at least 90% must not exceed 2" protrusion of steel; and
- maximum of 5% fines.

TDM 12-C

- At least 90% must be smaller than 18";
- at least 50% must be larger than 6";
- at least 75% must be larger than 1½"; and
- maximum of 5% fines.

Scrap Specifications Circular 2006

Guidelines for Metals Transactions

These Guidelines are intended as a reference to assist members in carrying out their business obligations in a manner consistent with accepted industry practices. While the Guidelines are not obligatory, it is suggested that potential problems and misunderstandings may often be avoided by following those recommended procedures, in conjunction with ISRI's scrap descriptions.

At times, the respective parties to a transaction may be unaware of the differences in trading practices of the other party. This diversity of interpretation often leads to misunderstandings, disputes, and in some instances expensive lawsuits. It is with the objective of providing members the means of avoiding such friction that ISRI has published these Guidelines, which are based on those practices most common and current in the industry.

On those points where it is impractical to provide recommendations, it is advised that the points be mutually agreed upon by the parties involved.

Part I: Guidelines for Contracts

A contract is an agreement between two or more parties to perform a legally enforceable act.

Therefore, all contracts should be in writing and set forth in **specific** terms. Before signing a contract, one should carefully read and understand all terms of it. No discrepancies or ambiguities should exist at the time the contract is executed. If you receive a contract with terms that are objectionable, you should immediately notify the other party in writing of your objections. An attorney should be consulted when legal advice is needed.

It should be kept in mind that if a dispute arises under a contract, and a court is called in to interpret its terms, certain general rules will be applied. First, contracts will be construed as a "whole," and specific clauses will be subordinated to the contract's general intent. Second, the courts will construe words according to their "ordinary" meaning unless it is clearly shown that they were meant to be used in a technical sense. Also, where provisions appear to be inconsistent, the courts will determine whether some of the provisions are printed (indicating a form contract), as compared to others which are written or typed. The latter kinds of provisions will prevail.

It should be remembered that where you and a Buyer (or Seller) have reached verbal agreement on a transaction, your failure to sign and return a contract which is sent to you in confirmation of that verbal agreement may not relieve you of the obligations of the terms and conditions enumerated in that contract.

These Guidelines were developed to cover routine transactions. It is essential that any unusual arrangements must be completely spelled out in a contract. With these factors in mind, the following list of items is enumerated as a **Checklist** for you to follow, either in the construction of a contract, or for

the review of another party's contract proposal. We cannot overemphasize the need for accuracy and specificity.

Checklist Items

(BE SPECIFIC AT ALL TIMES)

I. Parties to Agreement:

Indicate full name and address of Buyer and Seller. Include name of individual person or persons involved. Buyer's and Seller's signatures are fundamental.

II. Date of Contract:

- (a) Give date the initial agreement was reached
- (b) Give Contract Number.

III. Description of Material:

Use NF code names or clearly describe what is being traded. Any allowable quality variation to be so stated. Ex: "X percent moisture allowed" or "Minimum CU content to be X percent" or "X percent painted material allowed."

IV. Quantity:

State exact quantity expected and indicate allowable tolerances or minimum/maximum limitations. Ex: "40,000 lbs. (5% More/Less allowed)" or "38,000 to 42,000 lbs."

V. Packing:

State type of packing allowable and restrictions if such are required. Ex: "Bales not to exceed 60 inches"; "Bales not to exceed 3,500 lbs."

VI. Delivery:

Show complete address of shipping or delivery point, including where applicable, specific rail siding or junction, forwarding warehouse, and party to be notified. Ex: "FOB (Actual Point of Shipment) Chicago, Ill."; "FOB (Actual Point of Delivery) St. Louis, Mo."; "FAS Baltimore Container Yard"; "C&F Tokyo, Japan." If these details cannot be furnished at the time of writing of contract, it should state "shipping/delivery instructions to follow." State means of conveyance to be employed. State size and type of truck, rail car, container or number of shipments expected or permitted.

VII. Shipment:

Time allowed for shipment or delivery should be clearly stated. Ex: "Shipment by Jan. 15, 2006 LATEST"; or "Delivery by Jan. 15, 2006." Indicate at whose option, Buyer's or Seller's, shipment shall be made in time period stated.

VIII. Price:

State price per unit. Ex: "\$20.00/CWT"; "20.00 Cents/Pound"; "\$400.00/Net Ton"; "\$440.92/Metric Ton." and indicate where appropriate "Clean and Dry"; "Full Copper Content." If applicable, state exact processing, smelting, refining charge, or unit deductions for impurities. (Avoid the use of the word "penalties.")

IX. Payment:

Terms of payment should be explicit. Ex: "Net 30 days after shipment"; "Net 15 days after mill receipt." Avoid phrases such as "usual"; "Net 30;" "Net Cash." Documents required to effect

payment to be clearly stated. Ex: "Bill of Lading"; "Invoice"; "Weight Certificate." State how payment shall be made. If there is discussion of compensation for delayed payments, it should be included in the contract. If Letter of Credit is called for as a means of payment, it is advisable that the terms to be included in the Letter of Credit also be stated in the contract. When applicable, contract should state whether Buyer or Seller is responsible for payment of taxes, duties, or any other levies to which a shipment could be subjected. Contract should state whether the Seller's or Buyer's weights shall govern the basis of settlement.

X. Assignment:

The contract may state whether the Buyer and/or the Seller has the right to assign the contract. If it does, it should emphasize that the obligation arising under the contract shall be equally binding on his assignee.

XI. Notice:

The Seller should specify how notice to be given under the contract should be received—i.e. by hand, by telegram, by certified or registered mail. One should also specify when notice is deemed to be received by the party to whom it is given.

XII. Disclaimer of Warranties:

Depending on the type of transaction, or the metal involved, the Seller may want to limit his liability by disclaiming any warranties of merchantability or of fitness for a particular purpose.

XIII. Default:

The contract should contain a provision setting forth the events which would result in a default of the contract. This provision might also contain a clause stipulating damages and/or setting forth available remedies (i.e. specific performance) in the event a default does, in fact, occur.

XIV. Force Majeure:

This item is related to the item of default, as indicated in paragraph XIII. Seller or Buyer may enumerate, either generally or specifically, what events (i.e. strikes, fires, accidents) constitute circumstances beyond its control and thereby absolve him/her of any liability for damages or delay.

XV. Non-Waiver:

The Seller or Buyer should state in the contract that his/her failure to insist upon strict performance in any given instance shall not be construed as a waiver or relinquishment for the future of any of the terms, covenants and conditions contained therein.

XVI. Claims:

The Seller may specify that any claims involved in a metals transaction for contaminated materials, weight shortage, or for any other cause is waived by the Buyer unless brought to the Seller's attention within a certain number of days after delivery.

XVII. Arbitration and Applicable Law:

The contract should set forth which state's or country's law will apply in the event of a legal dispute under the contract. It should also provide for arbitration procedure. (If ISRI Arbitration is desired, the contract should so stipulate.)

XVIII. Benefit:

The contract should stipulate on whom it is binding. For instance, the Seller or Buyer may want to specify that the con-

tract inures to the benefit of the parties, their legal representatives, successors and assignees.

XIX. Entire Agreement:

This provision is especially important in the area of metals transactions, which frequently involve extensive preliminary negotiations. A clause may be inserted into the contract stating that the contract constitutes the parties' entire agreement and supersedes all prior agreements and understandings with respect to the subject matter of the contract.

XX. Modification:

A clause may be included in the contract stating that the contract's requirements can only be modified by a written instrument signed by the parties or their respective agents. This insures that the parties' informal discussions will not later be construed as affecting an alteration of the contract.

Part II: Packing, Weighing, Shipping and Receiving

It is recommended that strict adherence to contract terms will minimize many of the potential problems in this area. If there is a question about any item, one should communicate with his/her Buyer/Seller and clarify the situation prior to shipping. Listed below are some specific guidelines to be used in avoiding the most frequently reported problems.

Packing (All Shipments)

Seller's Responsibility:

- a. Pack in the manner and form agreed. Example: In sound bales, briquettes, boxes, pallets, drums, loose, etc.
- b. Be sure that Buyer agrees with your definition of words and phrases, i.e. Bale, Briquette, Coil, etc. as well as allowed dimensions and weights of such.
- c. Material and packages should be securely tied or supported so that packages will hold in transit and normal handling.

Buyer's Responsibility:

- a. Advise Seller of any specific prohibitions, i.e. type or method of packing, size or weight of pieces, units or packages, etc.
- b. Be sure that Seller agrees with your definition of words and phrases, i.e. Bale, Briquette, Coil, etc., as well as allowed dimensions and weights of such.

Weighing, Shipping and Receiving (Truck Shipment)

Seller's Responsibility:

- a. Each package should be individually weighed and the entire truckload should be checkweighed for comparison. Reconcile or explain any differences. If truck is weighed during inclement weather or wind, make note of this on weight ticket.
- b. Trailers should be drop-weighed (both empty and loaded).
- c. All equipment should be inspected before loading, and cleaned or repaired where necessary to avoid loss or spillage.
- d. Open top trucks or trailers should be tarped or covered.

- e. Vans and closed trailers should be sealed and seal numbers indicated on all documents.
- f. If your customer requires appointments, make one in advance. Otherwise, as a courtesy, advise the Buyer of your anticipated delivery schedules.
- g. A complete manifest and packing list should accompany each shipment. This should clearly indicate the order number, items shipped, number and type of packages of each commodity, as well as the gross, tare and net weights of each package. This detailed information should be put into an envelope and attached to the inside wall of the truck or van. If this cannot be done, give a complete set of papers to the driver to deliver with the original Bill of Lading covering the shipment. At the very least, notify Buyer by telephone, telex or wire of these details on the day shipment leaves.
- h. Different lots should always be properly segregated and bulkheaded to avoid comingling. Each package should be tagged or marked to aid in proper identification and segregation at the receiving point.
- i. Be aware that someone at the delivery point will have to unload the shipment. Pay particular attention to door areas to assure that material is loaded safely. Proper care should be taken to insure that the material can be unloaded in a safe and expedient manner.

Buyer's Responsibility:

- a. If Seller requires appointment prior to pickup, make one in advance. Otherwise, as a courtesy, advise the Seller of your anticipated pickup schedule.
- b. Trailers should be drop-weighed (both empty and loaded).
- c. Carefully check shipment advices and compare package count, seal numbers, weights.
- d. **Prior to unloading**, if a significant* weight difference is apparent, the Seller should be notified promptly and, if requested, another weight should be taken to determine if spillage or theft might have occurred.
- e. **After unloading**, promptly advise Seller of any significant* differences between advised and actual weights, segregation, classification or quality. (Note: Refer to Part IV of the circular for recommended procedures in handling quality problems.)
- f. Truck or trailer should be completely unloaded including any spilled material which should be picked up, weighed and identified as spilled from original containers. Buyers should cooperate in every way to help minimize losses.

Weighing, Shipping and Receiving (Rail Shipment)

Seller's Responsibility:

- a. Each package should be individually weighed and the entire rail car should be checkweighed for comparison. Reconcile or explain any differences. If rail car is weighed during inclement weather or wind, make note of this on weight ticket.
- b. Railroad cars should be uncoupled and at rest (if possible) before weighing.

- c. All equipment should be inspected before loading, and cleaned or repaired where necessary to avoid loss or spillage.
- d. Railroad cars should be sealed and seal numbers indicated on all documents.
- e. A complete manifest and packing list should accompany each shipment. This should clearly indicate the order number, items shipped, number and type of packages of each commodity, as well as the gross, tare and net weights of each package. This detailed information should be put into an envelope and attached to the inside wall of the railroad car. If this cannot be done, mail a complete set of papers to the Buyer on the day shipment leaves.
- f. Different lots should always be properly segregated and bulkheaded to avoid comingling. Each package should be tagged or marked to aid in proper identification and segregation at the receiving point.
- g. Be aware that someone at the delivery point will have to unload the shipment. Pay particular attention to door areas to assure that material can be unloaded in a safe and expedient manner.

Buyer's Responsibility:

- a. Railroad cars should be uncoupled and at rest (if possible) before weighing.
- b. Carefully check shipment advices and compare package count, seal numbers, weights.
- c. **Prior to unloading**, if a significant* weight difference is apparent, the Seller should be notified promptly and, if requested, another weight should be taken to determine if spillage or theft might have occurred.
- d. **After unloading**, promptly advise Seller of any significant* differences between advised and actual weights, segregation, classification or quality. (Note: Refer to Part IV of the circular for recommended procedures in handling quality problems.)
- e. Rail car should be completely unloaded including any spilled material which should be picked up, weighed and identified as spilled from original containers. Buyer should cooperate in every way to help minimize losses.

Weighing, Shipping and Receiving (Export/Import Shipment)

Seller's Responsibility:

- a. Each package should be individually weighed and the entire container load should be check-weighed for comparison. If container is weighed during inclement weather or wind, make note of this on weight ticket.
- b. Container and chassis should be drop-weighed, if possible, both empty and loaded.
- c. Prepare and send to Buyer a complete manifest and packing list indicating the order number, items shipped, number and type of packages of each commodity, as well as the gross, tare and net weights of each package and the seal numbers.
- d. If shipment is against a Letter of Credit, pay strict attention to all terms.

- e. Place seals on all container doors and indicate seal numbers on documentation.
- f. Material and packages should be properly stowed and braced to prevent movement during shipment.
- g. Be aware that someone at the delivery point will have to unload the shipment. Pay particular attention to door areas to assure that material is loaded safely. Proper care should be taken to insure that the material can be unloaded in a safe and expedient manner.

Buyer's Responsibility:

- a. Container and chassis should be drop-weighed, if possible, both empty and loaded.
- b. Carefully check shipment advices and compare package count, seal numbers, weights.
- c. **Prior to unloading**, if a significant* weight difference is apparent, the Seller should be notified promptly and, if requested, another weight should be taken to determine if spillage or theft might have occurred. Seller should be given opportunity to appoint surveyor or representative to verify weights.
- d. **After unloading**, promptly advise Seller of any significant* differences between advised and actual weights, segregation, classification or quality. (Note: Refer to Part IV of the circular for recommended procedures in handling quality problems.)
- e. Container should be completely unloaded including any spilled material which should be picked up, weighed and identified as spilled from original containers. Buyer should cooperate in every way to help minimize losses.

*For purposes of this section, the meaning of the word "significant" shall be determined by agreement between Buyer and Seller, depending on the commodities and their values.

Part III: Transportation Guide

The mode and type of conveyance should be specified in the contract. If it has not been, then it is important that Buyer and Seller agree upon the mode and type to be used. These guidelines will assist in determining the appropriate means of transportation to employ.

A. Mode—Truck/Trailer

- 1. Type:
 - a. Dump
 - b. Removable sides
 - c. Van—open or closed
 - d. Dimensions of unit (20 ft., 40 ft., etc.)
 - e. Determine if truck/trailer capacity meets minimum weight specified on contract.

B. Mode—Rail Car

- 1. Type:
 - a. Box car or gondola
 - b. Size of door opening, i.e. single or double door
 - c. Special type D.F., Hi-Cube, etc.

- d. Dimensions of car (40 ft., 50 ft., 60 ft., etc.)
- e. Determine if rail car capacity meets minimum weight specified on contract.

C. Export Shipments

- 1. Container:
 - a. Type of container, i.e. closed, open-top, flat rack, Hi-cube, etc.
 - b. Size of container (20 ft., 35 ft., 40 ft., 45 ft., etc.)
 - c. Determine if container capacity meets minimum weight specified on contract.
- 2. Breakbulk

Part IV: Rejections—Downgrades—Claims

A brief explanation of these items will help one understand and implement the procedures recommended in this section.

Rejections: Rejections can occur when a Buyer refuses to accept a shipment of material that does not conform to the description specified in the contract. Usually in such cases, the Buyer cannot utilize the material and the Seller is asked to remove the material from the Buyer's place of delivery. A rejection can occur prior to unloading, but often the cause of the problem cannot be determined until the material has been off loaded and graded. Any part, or all, of the shipment may be subject to rejection.

Downgrades: Downgrades can occur when all, or part, of the material in a shipment is not in conformity with the description specified in the contract. Often, in such cases, the Buyer can utilize the material and is willing to accept delivery of the material, subject to a price commensurate with its value.

Claims: This term is used mostly in export-import movements, and is used generically to encompass both **rejections** and **downgrades**, as well as **weight shortages**.

Strict adherence to contract terms can minimize the common causes of these difficulties. However, if a problem arises, it should be given prompt attention and settlement should be attempted as quickly as is practical. It is essential that both parties cooperate and keep communications open to minimize expenses and to preserve the relationship. Negotiations should not be conflicting but mutually beneficial and fair. Listed below are some recommended steps to be taken when a problem arises.

Domestic Shipments

Buyer's Responsibilities:

- a. In the event of a rejection Buyer must notify Seller immediately by telephone or telex. If Seller fails to respond within two business days, Buyer may return material in most prudent manner. Subject to contract provisions, Buyer should promptly advise Seller concerning replacement of rejected material.
- b. In the event of a downgrade Buyer must notify Seller immediately by telephone or telex and afford Seller an opportunity to inspect the material prior to its use. If material is to be inspected by Seller or his/her representative, Buyer should agree to a mutually convenient time to do so.

- c. Buyer must give Seller option of removing material if he/she does not agree to downgrade. (All costs of unloading and reloading are for Seller's account.)

Seller's Responsibilities:

- a. In the event of a rejection Seller should respond promptly and advise Buyer of his/her intentions. Seller must reply within two business days. Subject to contract provisions, he/she must advise Buyer promptly concerning replacement of rejected material.
- b. In the event of an unacceptable downgrade Seller must advise Buyer within two business days if he/she wishes to inspect material and agree upon a mutually convenient time to do so.
- c. If Seller wishes to remove downgraded material from Buyer's delivery point, he/she must advise Buyer promptly. (All costs of unloading and reloading are for Seller's account.)

Export-Import Shipments

Buyer's Responsibility:

- a. In the event of a claim, time is of the essence and notification should be given to Seller within a reasonable period of time after arrival of vessel in receiving port.
- b. In the event of a claim, the material should be held intact until agreement has been reached. The acceptable portion of the material may be consumed and/or arrangements may be made to sample a portion of material, i.e., 10-25% with balance held intact pending resolution of claim.

Seller's Responsibility:

- a. In the event of a claim, Seller should respond to Buyer's notification promptly by telephone, telex, wire, or cable.
- b. When a claim settlement has been agreed upon, terms of settlement must be followed promptly.

ISRI Arbitration Service

ISRI established an arbitration service as a means to enable members to utilize arbitration to resolve disputes.

ISRI arbitration is a voluntary procedure and must be agreed upon by both parties in the dispute. The arbitration procedure can only be initiated by a member of the Association. It is not required that both parties to the dispute be ISRI members.

The complete procedure for arbitration is set forth in ISRI's "Rules for Arbitration," which are available from Association headquarters in Washington, D.C. The rules contain the necessary form that must be completed to initiate arbitration. ISRI treats all filings, awards, and proceedings as confidential.

The rules are highlighted below:

1. Any member of the association may propose arbitration in a dispute with another member or nonmember. Both parties must agree to the arbitration by signing a "Submission to Arbitrate" form and agreeing to abide by the applicable Arbitration Rules.
2. A panel of arbitrators has been established by the association. The arbitrators serve without compensation, except for reasonable expenses. The arbitration parties must draw their arbitrators from the panel. A maximum of three arbitrators can be issued in any proceeding; the parties are encouraged to use a single arbitrator.
3. There is a specific schedule of fees listed in the "Rules for Arbitration." Each party must deposit with the association in advance \$500 plus \$500 for each arbitrator. The total deposit for each party thus is either \$1,000 or \$2,000, depending on whether one arbitrator is to be used or three. A portion of the fee is refundable if not required to defray arbitrators' costs. The arbitrators may require the losing party to reimburse the prevailing party for its share of these costs.

4. The arbitration procedure usually includes a hearing, at which time the parties involved are required to appear, present their respective cases, and be available for questioning by the arbitrator(s). All physical evidence (contracts, correspondence, relevant comments, etc.) may be required to be submitted in advance to the arbitrators. A party in the arbitration may be accompanied by counsel but must inform the other party in advance and receive permission from the arbitrators. Witnesses may also be called to an arbitration hearing. There is also an optional procedure for conducting the arbitration without an oral hearing.
5. An award by the arbitrator(s) will be made promptly, within 20 days after hearings have been completed or final briefs submitted. The award is made in writing, and is certified.
6. The rules state that the parties to the dispute shall be deemed to have consented that a judgment upon the award be entered in any court having jurisdiction over an action to enforce the award.

Members who wish to provide an automatic basis for the settlement of any disputes arising from a transaction are encouraged to provide in their contracts that the ISRI Arbitration Procedure shall prevail in the event of any ensuing controversy and that each party will take all necessary steps to initiate such arbitration. Members are urged to obtain and carefully read the "Rules for Arbitration" before proceeding.

For more information, contact Steve Hirsch, 202/662-8516 or email stevehirsch@isri.org.