



## Section 1.0 Background and Scope

This plan is written to address shredder combustion events at River Metals Recycling LLC's Louisville, KY metal shredder. These combustion events, while loud, are safely contained within the several inch thick steel walls of the shredder mill. They have not caused injuries to RMR's employees or damaged RMR's equipment. However, they have resulted in shredder downtime to replace flaps and other control devices and have also resulted in complaints from neighbors due to the sound.

Based on RMR's investigations and experience, the immediate cause of these combustion incidents is the presence of either not-completely-emptied propane bottles in cars (generally hidden in the car trunks) or residual gasoline in vehicle fuel tanks. The contributing causes are (i) the difficulty of being able to consistently inspect the contents of car trunks or the condition of gas tanks when cars are delivered to RMR in crushed form; and (ii) the lack of outlets for proper disposal of used propane canisters, either at landfills or recycling centers.

While it is unrealistic to think that all combustion events can be eliminated, RMR believes that a significant reduction of these events is achievable through communication, increased inspection, more concrete corrective action with non-conforming suppliers and loads of scrap metal, and establishment of an outlet for safe and proper management of scrap that would cause combustion events if not identified and removed through regular inspection practices.

Sections 2.0 through 8.0 of this plan describe the specific actions that RMR has either already taken or will soon take to reduce the incidence of combustion events, including (1) better outreach and education of our scrap suppliers; (2) creation of an improved disposal/recycling option for used propane canisters; (3) creation of an automobile fluid removal process for customers that bring whole cars to RMR's facility; (4) enhanced employee training; (5) enhanced inspection procedures; (6) enhanced documentation; and (7) improved corrective action measures against non-conforming suppliers.

## **Section 2.0 Outreach / Education of Suppliers**

Suppliers will be informed of our scrap specifications in four ways. For existing crushed car customer accounts where an active address is on file for the customer, a letter will be sent annually describing our unacceptable scrap criteria. A sample letter is found in Appendix A – Annual Supplier Letter. A list will be retained for each mailing describing the name, address, date, and a sample of the letter for the given mailing.

The second method of outreach involves signs and posting of unacceptable materials at the entrance way / scales as customers are approaching the scale. The signs identify both gasoline and propane bottles as unacceptable materials.

The third method will be verbal communication to our suppliers by the RMR inspectors who recognize unacceptable materials attempting to be delivered as scrap. These events shall also be documented in accordance with section 6.0 Documentation Protocols.

The fourth method for outreach is the application of source control stickers on all scrap metal containers 5 cubic yards or greater. These containers are commonly used at commercial and industrial accounts for the accumulation of scrap metal byproducts from manufacturing processes. The application of stickers that clearly identify unacceptable materials will better inform the individuals responsible for placing metal in these containers. Stickers shall be placed on each long side of the container. An example source control sticker is found in Appendix I.

## **Section 3.0 Propane / Gasoline Customer Recovery Service**

Scrap propane bottles are a significant source of combustion incidents because landfills will not accept them and there are currently no readily available outlets for proper disposal. As a result, people attempt to bring them to metal recycling facilities, which have historically rejected this scrap due to safety concerns. With no other outlet, some unscrupulous customers hide these propane bottles in the scrap, which could result in a combustion incident. RMR proposes to provide an outlet for safe and proper management of scrap propane bottles from peddlers.

RMR will assist bulk scrap suppliers by educating them on various options for proper management and disposal of propane bottles. Exact steps taken with each supplier will depend on the scope of the specific supplier's propane disposal needs and that supplier's ability and resources to address the issue. Steps to be taken for our comprehensive approach may include:

1. Accept 20 lb propane bottles directly from peddlers for proper management and disposal to prevent the bottles from integrating with the scrap metal stream being processed through the shredder.
2. Provide information to larger suppliers on setting up a recycling program with a propane tank distributor;
3. Provide information to larger suppliers and assist with contracting a tank disposal vendor;

Accumulated tanks will be processed to a safe condition for shredding by a company specializing in this type of work.

RMR also will continue to assist customers that bring whole cars to the RMR site that still contain fluids. This targets the control of combustion incidents caused by gasoline that is not properly removed from cars before shredding. This is done by identifying and marking all automobiles at the scale that the car still contains fuel. After proper processing of the automobile and recovery of the fuel, the car is marked again to clearly identify to the operators that the vehicle is OK for shredding.

## **Section 4.0 Employee Training**

Any employee (including temporary employees) working as a scrap inspector or truck driver will be trained on incoming scrap inspection before performing these duties.

New operations employees shall be trained on incoming scrap inspection within 30 days of being employed with the company. Initial incoming scrap inspection training for shredder employees will include all of the components of this plan, viewing the company's incoming scrap inspection video, and completing the "Scrap Inspection Training Document" found in Appendix C. This training will be documented with individual training records.

All operations employees shall be trained at least annually on incoming scrap inspection. Annual refresher training will be documented with sign-in sheets.

## **Section 5.0 Inspection Protocols**

### **Section 5.1 On-Site Inspections**

#### **a.) Scale Inspection**

Scrap inspectors will be stationed at two locations in the facility. The first location is at the inbound scale where a visual inspection is performed on the scrap by the scale operator. If the scale operator identifies any unacceptable item, he / she will immediately address this with the customer by rejecting the load, or 1.) isolating the item; 2.) returning it to the customer; and 3.) giving the customer a copy of Appendix B with the prohibited item highlighted. Additional documentation is described in section 6.0. The inspector at the unloading area will be notified of the unacceptable item by radio so he is aware of its presence in the load.

#### **b.) Unloading Inspection**

A second inspection is performed at the scrap pile while the scrap is being unloaded. If the inspector identifies an unacceptable item at this location he will place it back on the customer's vehicle and radio the scale to make sure the item remains on the vehicle when the customer weighs out. The inspector will provide the Appendix B list and record additional documentation as identified in Section 6.0.

#### **c.) Crane Inspection**

Crane operators also have the ability to inspect for combustible items while unloading scrap and transferring scrap to the shredder in-feed conveyor. If a crane operator identifies a combustible

item, he will immediately isolate it for proper management. If the supplier of the combustible item is known, he will immediately address this by contacting the inspector who will 1.) isolate the item; and 2.) give the customer a copy of Appendix B with the item highlighted. Additional documentation is described in section 6.0. RMR will arrange for proper management and disposal of the combustible item.

## **Section 5.2 Inspection of Crushed Cars**

Approximately 90% of all cars processed through the shredder are delivered crushed. Inspecting a crushed car generally requires the deployment of heavy equipment and much more time than inspecting a whole car, and it is not practical for RMR or any other shredder operator to thoroughly inspect every crushed car ever delivered to its facility. RMR will use a program combining on-site sampling of crushed cars and source control at the suppliers' facilities to limit non-conforming material.

Detailed inspection of crushed cars will be performed at random for each supplier at least annually. The detailed inspection involves using a crane and ground person to physically open hoods, trunks, and view inside the car in search of non-conforming materials. The inspection results will be documented on the "Crushed Car Supplier Inspection Form" found in Appendix H. The frequency of the detailed inspections shall be in accordance with the following table.

| Annual Truckload Deliveries of Crushed Cars | Frequency of Detailed Inspection |
|---------------------------------------------|----------------------------------|
| Less than 50                                | 1 Truckload per Year             |
| 51-500                                      | 1 Truckload per Quarter          |
| >500                                        | 1 Truckload Per Month            |

In some market conditions, purchased car volume is less than or approximately equal to the shredder daily capacity. When this occurs, the shredder manager may determine that inspection by the crane operator as the shredder is being fed is adequate to uncover potential prohibited items. When this situation arises, the formal detailed inspection process above may be temporarily suspended.

## **Section 5.3 Inspection at Commercial Accounts**

Truck drivers picking up containers at industrial accounts shall visually inspect the load before tarping and transporting to the scrap metal processing facility. If picking up flattened or crushed cars, the driver will check whether or not strong gasoline odors or liquids are present while loading onto the truck. If non-conforming materials are identified, the incident will be recorded on the log and it will be the responsibility of the RMR buyer that is in charge of the account to communicate with the supplier.

Additional inspection shall be provided at RMR when the scrap is unloaded.

The RMR Buyers shall also inspect scrap bins for unacceptable items during visits to commercial accounts. Non-conforming materials will be immediately addressed with the supplier.

## **Section 6.0 Documentation Protocols**

Appendix D - Problem Log – This log, sent out to a problem log e-mail distribution group shows non-conforming material for every shipment that has non-conforming material. Included in this distribution group is both buyers and yard management.

Appendix H -- Crushed Car Supplier Inspection Form – This document will be used to document detailed inspections of random loads delivered from designated suppliers of crushed cars.

Corrective actions taken against non-conforming suppliers will be tracked by the buyers.

Appendix F – Supplier Identification Number System -- shows how crushed cars are identified once they are delivered to the facility so that RMR can maintain accountability for bundles of cars. If there is a problem with the crushed cars, this will allow us to identify the supplier who delivered these materials.

## **Section 7.0 Corrective Action Measures Against Non-Conforming Suppliers**

The Problem Log shall be reviewed daily by the buyers and yard management. When prohibited items are found in a load of scrap, the shredder supervisor will notify the buyer for that account, or his backup immediately. The following actions will take place:

|                            |                                                                                                                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 <sup>st</sup> Occurrence | Buyer phone call to supplier, documented by email.                                                                                                                                                                                                       |
| 2 <sup>nd</sup> Occurrence | Buyer hand delivers supplier corrective action request to supplier. Corrective actions are due by close of business on the next working day.                                                                                                             |
| 3 <sup>rd</sup> Occurrence | Buyer and operations representative visit supplier and discuss further corrective actions                                                                                                                                                                |
| 4 <sup>th</sup> Occurrence | A review meeting will be held including GM, Buyer, PM, Safety Manager, and /or Ops VP or President. Meeting will be the same day as the occurrence and group will determine corrective action up to suspension of purchases from the offending supplier. |

## **Appendix A**

### **Annual Supplier Letter**

Crushed Car Supplier  
Name  
Street  
City State Zip

Dear Valued Supplier:

River Metals Recycling LLC previously wrote you a letter informing you of the danger prohibited items pose in recycled scrap intended for the auto shredder. Attached is a copy of the items prohibited in an automobile shredder.

A recent occurrence of hidden propane tanks in purchased scrap and gas tanks on automobile that were not properly drained has caused several combustion incidents at our shredders. Propane tanks and gasoline are prohibited items. These combustion incidents can cause downtime at our shredder and have caused our neighbors to complain about the noise. RMR is committed to preventing propane and gas tanks from getting into the shredder. Liability for any damages caused by prohibited items falls on the original seller of raw material.

RMR has made many changes to our inspection process and will require your cooperation in solving this problem. We will identify the source of material with a coding system and be able to determine which supplier caused a combustion incident. We are working hard to provide an alternative way to recycle propane tanks as well, and, will communicate any changes moving forward.

This is a very important compliance issue for RMR and your cooperation is needed. In order for RMR to continue purchasing your scrap, you **must** not include any of the Prohibited Items, including gasoline and propane. We appreciate your cooperation. Should you have any questions, please contact (Buyer's Name and Phone Number).

Sincerely,

River Metals Recycling LLC

Buyer's Name

## Appendix B Source Control (On our Website)



# Prohibited Items and Conditional Acceptance Criteria Source Control - Exhibit 1

## Prohibited Items

The following items are prohibited from acceptance at DJJ and its subsidiaries, except by special arrangement with DJJ:

- Acetylene Cylinders
- Asbestos or Asbestos Containing Materials (ACM)- applies to both fibrous and solid materials
- Any Scrap Containing Refrigerants (CFC or HCFC) unless the facility has agreed to recover the refrigerants
- Cathode Ray Tubes (CRT/tube-style computer monitors or televisions)
- Closed Compressed Gas Cylinders – high pressure cylinders with valve intact
- Combustible or Flammable Materials - fuels, paints, degreasers, unpunctured aerosol cans
- Corrosive Materials - highly acidic or caustic materials (battery acid, caustic soda, etc.)
- Explosive Materials, Munitions, Shell Casings – includes suspect military scrap
- Free Flowing Liquids (including water)
- Hazardous Waste – toxic or poisonous materials or wastes
- Infectious Materials – blood-soaked or biohazard items
- Liquids or Scrap Containing Free Flowing Liquids - fuels, antifreeze, oils, hydraulic fluid, paints
- Mercury Containing Materials - mercury-containing thermostats, switches or fluorescent light bulbs
- Non-Metallic Items - concrete, wood, asphalt, dirt, debris, tires (more than 5 per auto)
- PCB-Containing Materials
- Radioactive Scrap – anything exhibiting radiation levels above background
- Scrap with Small Capacitors that contain  $\geq 50$  ppm of PCBs

## Conditional Acceptance

The following items are prohibited from acceptance at DJJ and its subsidiaries, except by special arrangement with DJJ:

| Scrap Item                       | Conditions for Acceptance                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Crushed Automobiles              | Crushed autos are accepted, provided the refrigerants that have not previously leaked have been properly recovered, the battery, lead terminal connectors, lead wheel weights, and mercury containing convenience light switch assemblies have been removed, the fluids have been removed to extent practicable or otherwise required by law, and air bag canisters have been deployed or removed as required by law. |
| Transformers                     | Unless agreed to otherwise, transformers must be completely drained, and have an analytical report on the oil that was previously contained that shows PCB concentrations were less than 2ppm.                                                                                                                                                                                                                        |
| Industrial 55-Gallon Drums       | Accepted if they are open top and are completely empty with no solids or vapors, or are closed top and are empty and crushed flat such that no vapors could be accumulated.                                                                                                                                                                                                                                           |
| Propane Cylinders                | Accepted if the valve has been removed. These must be managed in a designated area.                                                                                                                                                                                                                                                                                                                                   |
| AST or UST Petroleum Tanks       | Accepted as scrap if there are holes large enough to physically inspect the inside to verify the tanks contain no sludge or residue, and there are no combustible vapors present.                                                                                                                                                                                                                                     |
| Oil Motor Blocks/ Transmissions  | Accepted only at DJJ facilities equipped with a means of containing fluids and controlling or capturing and managing stormwater from these storage areas.                                                                                                                                                                                                                                                             |
| Batteries and other Lead Sources | Accepted only at the non-ferrous kiosks. These items cannot be mixed with sheet iron or left in automobiles.                                                                                                                                                                                                                                                                                                          |
| Oil Filters                      | Must have been drained in accordance with local or federal laws and regulations.                                                                                                                                                                                                                                                                                                                                      |



**Appendices are not controlled documents**   LV Shredder Combustion Incident Reduction Plan  
See individual files for controlled appendices   Last Revised: 02/2017

**Appendix H  
Crushed Car Supplier Inspection Form**

**Date / Time Performed:** \_\_\_\_\_

**Ground Person and Operator Performing Inspection:**

\_\_\_\_\_

**Supplier (Company and Crush Crew):**

\_\_\_\_\_

**Number of Cars on Load:** \_\_\_\_\_

**Check the appropriate box for each of the following items:**

| <b>Yes</b>               | <b>No</b>                | <b>Item</b>                                                                                             |
|--------------------------|--------------------------|---------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Was the entire load absent of aerosol cans?                                                             |
| <input type="checkbox"/> | <input type="checkbox"/> | Was the entire load absent of propane bottles?                                                          |
| <input type="checkbox"/> | <input type="checkbox"/> | Were there visible holes in the underside of every tank to verify gasoline had been previously removed? |
| <input type="checkbox"/> | <input type="checkbox"/> | Was the load free of strong gasoline vapors?                                                            |
| <input type="checkbox"/> | <input type="checkbox"/> | Had all batteries been removed from all vehicles?                                                       |
| <input type="checkbox"/> | <input type="checkbox"/> | Had the lead connectors been removed from the battery compartment?                                      |
| <input type="checkbox"/> | <input type="checkbox"/> | Have lead wheel weights been removed from the wheel rims?                                               |

**Explain Any “No” Answers:**

\_\_\_\_\_

\_\_\_\_\_

**Action items as a result of the detailed inspection:**

\_\_\_\_\_  
**Signature of Inspector**

\_\_\_\_\_  
**Date**

**Appendix I**  
**Source Control Sticker for Containers**

| PROHIBITED MATERIALS<br>(MATERIALES PROHIBIDOS)           |                                                                                   |                                                   |                                                                                   |                                                                               |                                                                                     |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>RADIOACTIVE MATERIALS</b><br>(MATERIALES RADIOACTIVOS) |  | <b>HAZARDOUS MATERIALS</b><br>(LIQUIDO PELIGROSO) |  | <b>NON-METALLICS</b><br>(NO-METALLICO)                                        |   |
|                                                           |                                                                                   | Oil<br>Antifreeze<br>Paint                        |                                                                                   | Tires<br>Dirt<br>Wood<br>Asbestos                                             | Insulation<br>Fiberglass<br>Roofing<br>Solid Waste                                  |
| <b>FLAMMABLE MATERIALS</b><br>(MATERIAL INFLAMABLE)       |  | <b>PCBS</b>                                       |  | <b>REFRIGERANTS</b><br>(REFRIGERANTES)                                        |   |
|                                                           |                                                                                   | Capacitors<br>Transformers<br>Ballasts            |                                                                                   | Freon / Substitutes (e.g., R-134a)<br>Cars<br>Compressors<br>Air Conditioners |                                                                                     |
|                                                           |                                                                                   |                                                   |                                                                                   | <b>OTHER HAZARDOUS MATERIALS</b><br>(LIQUIDO PELIGROSO)                       |  |
|                                                           |                                                                                   |                                                   |                                                                                   | Batteries                                                                     |  |
|                                                           |                                                                                   |                                                   |                                                                                   | <b>CORROSIVES</b><br>(CORROSIVO)                                              |                                                                                     |
|                                                           |                                                                                   |                                                   |                                                                                   | <b>COMPRESSED GAS CYLINDERS</b><br>(CILINDROS DE COMPRESICO)                  |  |
|                                                           |                                                                                   |                                                   |                                                                                   |                                                                               | <b>EXPLOSIVES</b><br>(EXPLOSIVOS)                                                   |
|                                                           |                                                                                   |                                                   |                                                                                   | Fire Arms<br>Ammunition<br>Shells                                             |  |

**Appendix J**  
**Combustion Incident Investigation Form**

**Date / Time the event occurred:**

**Persons responsible for the investigation:**

**Describe the nature of the material suspected to have caused the combustible incident:**

**Describe the supplier of the scrap that resulted in the combustible incident and how this was determined:**

**Describe all communication taken with the supplier (i.e. phone calls, written correspondence, discussions with drivers, etc.):**

**Additional Comments:**