This safety resource was written for the recycled materials industry by the recycled materials industry and was developed to assist you in making your recycling operation a safe place for employees, customers, and visitors. This resource covers OSHA requirements that may or may not be applicable to your operation.

SLING

DEFINITION: Flexible lifting attachment used with crane hook, bucket, shovel or similar to hoist and move materials or equipment.

Potential Hazards:
- Falling materials
- Sharp edges
- Pinch points
- Swinging suspended materials

Guarding/Shielding:
- Workers on ground in vicinity of lifted materials should be located in designated safety zone during lifting/hoisting operation.

- Operator of crane or device using a sling should be located in enclosed cab with sufficient impact resistance to prevent injury upon impact of falling or swinging materials.

Protective Equipment:
Hard hats*
Safety glasses*
Steel toe/steel shank work boots*
Gloves as needed
Respirator as needed
minimum requirements

Safety Procedures:
- Slings must not be used if damaged or defective. Use Inspection sheet to verify condition for use. Inspections must occur before each use.

- Slings must not be loaded in excess of rated capacity.

- Employees on ground must clear the area after attaching sling to materials and remain in designated safety zone while materials are hoisted or swinging.

- Suspended loads must be kept clear of buildings, power lines and any walking or working areas.

- Loads must be balanced before attempting lift.

- All workers performing the hoisting/lifting operation must be familiar with the hand signals employed and/or have access to radio communication with crane/equipment operator during hoisting activity.

- Signs must be posted in the work area that identify hand signals that are in use, and the designated safe zones.

- The operator of the crane/equipment performing hoisting/lifting must always have an unobstructed view of the work area.

- Only slings that have been inspected and approved for use are allowed.

Sling Inspection Checklist
Wire rope, synthetic web, chain, and metal mesh slings

Inspected by: _____ Date: _____	OK	No	N/A
Remove wire rope sling from service if TEN randomly broken wires lay in one rope, or FIVE broken wires in one strand			
Remove wire rope sling from service is wear or scraping has removed 1/3 the original diameter of outside individual wire			
Remove wire rope sling from service if kinking, birdcaging, or any other damage results in distortion of rope structure			
Remove wire rope sling if evidence of caustic or acid burns or heat damage			
Remove wire rope sling from service if end attachments are cracked, deformed, or worn			
Remove wire rope sling from service is capacity tag is missing or ineligible			
Remove synthetic web sling from service if acid or caustic burns are evidenced.			
Remove synthetic web sling from service if burns, charring, or melting is evidenced			
Remove synthetic web sling from service if snags, punctures, tears or cuts are evidenced			
Remove synthetic web sling from service if there are broken or worn stitches			

Remove synthetic web sling from service if there is wear exceeding manufacturer's recommendations			
Chain sling links cannot be bent, stretched, cracked or heat damaged			
Rings and hook cannot be distorted cracked at welds, or have corrosion or heat damage			
Chain slings cannot have deformed master link or coupling links			
Chain sling hooks cannot have more than 15% normal throat opening or more than 10 degrees twist from plane of unbent hook			
Chain sling hooks must have safety latch that works			
Chain sling hooks must be removed from service if capacity rating tag is missing or illegible			
Metal mesh slings cannot have broken welds or joints			
Metal mesh slings cannot have broken wire in any part of the mesh			
Metal mesh slings cannot be used if abrasion has reduced 25% of wire, or if corroded more than 15%			
Metal mesh slings cannot be distorted, twisted at ends or have cracked fittings			
Metal mesh slings cannot be used if capacity tag is missing or illegible.			